



SECTION 3

INFORMATION TECHNOLOGY PROJECTS

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SECTION 3 INFORMATION TECHNOLOGY PROJECTS

3.1 Technology Overview

The Information Technology investment fund (Fund 100-C10040 – formerly Fund 104), was established in FY 1995 to optimize centralized management of available resources by consolidating major Information Technology (IT) projects in one fund. Based on the 1994 Information Technology Advisory Group (ITAG) study, this fund was created to account for spending by project and is managed centrally by the Department of Information Technology. The E-911 Emergency Telephone Service Fee, a General Fund transfer, other revenue funds, the State Technology Trust Fund, and interest earnings are sources for investment in eligible Information Technology projects. However, in FY 2001, the E-911 Emergency Telephone Service Fee revenue and related project expenses were moved to Fund 400-C40091 (formerly Fund 120 E-911), to satisfy a state legislative requirement that E-911 revenues and expenditures be accounted for separately.

The County's technology improvement strategy has two key elements: redesign business processes and apply technology to achieve improvements in service quality and efficiencies for agencies, and provide an adequate technology infrastructure that supports County technology solutions. The County's long-term commitment to provide quality customer service through the effective use of technology is manifested in service enhancements, expeditious response to citizen inquiries, round the clock on-line service opportunities, improved operational efficiencies, and increased productivity and performance capabilities resulting in better information for management decisions and transparency.

FY 2018 Project Funding

In FY 2018 investment of \$7.17 million in IT projects is supported by multiple funding sources (General Fund transfer, interest income, and Cable Communication revenues). These initiatives meet one or multiple priorities established by the Senior Information Technology Steering Committee and include a mix of projects that benefit both citizens and employees, and the need for securing and strengthening the County's technology infrastructure. Funded projects support initiatives for general County services, public safety, human services, and enterprise technology security and infrastructure. Although many initiatives meet more than one of the technology priorities, for narrative purposes below, projects have been grouped into only one priority area.

Funding Priorities

The Senior IT Steering Committee, which is comprised of the County Executive, Deputy County Executives, the Chief Financial Officer, the Chief Technology Officer, and other senior County managers, adopted five strategic priorities that guide the direction of IT investments. These long-standing priorities include:

- **Mandated Requirements** - Provide support for requirements enacted by the Federal Government, Commonwealth of Virginia, Board of Supervisors, and those that are Court ordered or result from changes to County regulations.
- **Completion of Prior Investments** - Provide support for multi-year lease purchases and to implement a project phase, and/or to complete a planned project.



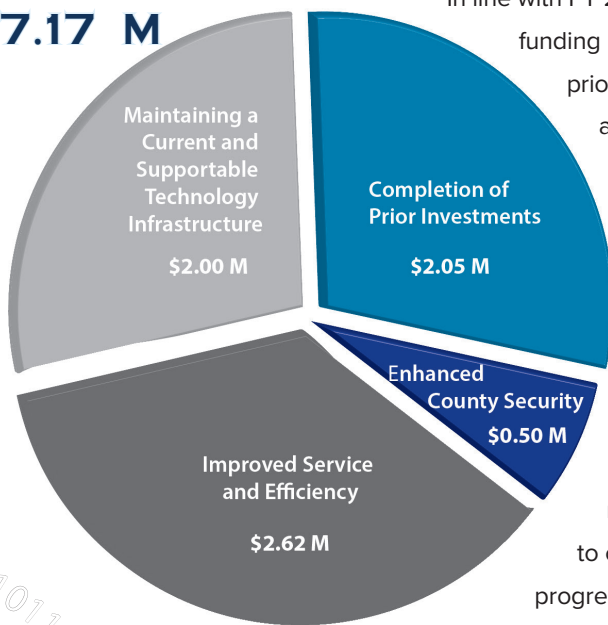
- **Enhanced County Security** - Provide support for homeland security, physical security, information security, and privacy requirements.

- **Improved Service and Efficiency** - Promote consolidated business practices; support more efficient government; optimize management and use of County assets and data; enhance systems to meet the expectations and needs of citizens; and promote service that can be provided on-line through the Internet/e-Government. This includes corporate and strategic initiatives that add demonstrable value to a broad sector of government or to the County as a whole, which also provide

productivity benefits and/or effectively manage the County's information and knowledge assets.

- **Maintaining a Current and Supportable Technology Infrastructure** - Focus on technology infrastructure modernization which upgrade, extend or enhance the overall architecture or major County infrastructure components, including hardware, software, and its environment. Ensure that citizens, businesses and County employees have appropriate access to information and services. This also includes cyber security protective solutions.

7.17 M



In line with FY 2018 Budget Guidelines, agencies were advised to submit new project funding requests that met one or more of the five above Senior IT strategic priorities; as well as specify tangible project outcomes; clear project start and completion dates; anticipated implementation and budget plans over the next five years, including subsequent fiscal year(s) impact on enterprise wide infrastructure, maintenance and support; linkage to agency strategic and business goals; and that the project would be completed and maintained without additional staff resources. Agencies were further instructed to carefully evaluate urgency, feasibility, readiness, and the strategic business value of initiatives for which an IT Project funding request would be submitted. FY 2018 funding requests for existing projects were limited to projects requiring additional support to meet existing contractual obligations, to complete a planned phase of the project and where appropriate progress against existing project plans had occurred. The process is designed to facilitate the development of a solid business and technical case for IT project requests, and to update the business and technical status for continuing projects.

Completion of Prior Investments – \$2.05 M

The County's IT program focuses on using technology as an essential tool to enable cost-effective delivery of services, and continues to stress the need to build reliable, supportable projects for these services in a timely manner. While some projects can be completed within the fiscal year, most are multi-phase projects requiring more than one year of funding.

In FY 2018 funding of \$130,740 is provided to continue support for the County's planned maintenance of essential Geographic Information System (GIS) data. Planimetric data layers make up many key GIS

layers used in most of County maps including: the Police Department, Fire and Rescue Department, the Departments of Transportation, Housing and Community Development, Public Works and Environmental Services, Planning and Zoning, and Tax Administration. Oblique imagery is also essential for many of key critical County functions including public safety, zoning, tax administration, and 3D Virtual Fairfax. These key datasets are used in all of the County's web applications that incorporate maps, and in nearly all public safety vehicles through the Computer Aided Design (CAD)/911 system. ***In FY 2018 Oblique Imagery and Planimetric Update projects will be consolidated and will remain in the County's IT Investment Portfolio in one program entitled Geospatial Initiatives.***

FY 2018 funding of \$428,500 supports continued development and implementation of the Customer Relationship Management (CRM) solution in County agencies. This initiative provides a unified user approach for handling citizens' service requests, case management, and issue tracking. CRM is a foundational technology that supports the County's strategic goal of improving the quality and efficiency of responses to citizen requests/issues by integrating stovepipe applications, implementing on-line 24x7 access strategies, integrating social media tools and techniques to enhance the overall customer experience, and manage service requests via a single user enterprise-wide interface tool.

Funding of \$300,000 in FY 2018 provides for the next phases of the Interactive Voice Response (IVR) Project. This multiphase initiative will migrate agencies that use IVR systems to a more modern platform enabling interactive text to speech applications that can build voice/phone applications for self service automation. The new IVR platform facilitates more efficient payment, information processing, management of citizen requests and inquiries, and provides opportunities for business process improvements.

FY 2018 funding of \$690,000 continues support for upgrading the high technology courtrooms in Fairfax County's Courthouse to a new digital platform necessary to meet current industry standards. In 2008, the Courtroom Technology project deployed Courtroom Technology Management System (CTMS) which is operational in courtrooms at the Fairfax County Courthouse. The system enables evidence presentation in courtrooms through a centralized, integrated audio/video network of microphones, monitors, assistive listening devices, and flat screen displays. With significant changes in technology, a multiphase plan is underway to replace outdated analog hardware with digital components and retrofit CTMS in the courtrooms.

FY 2018 funding of \$500,000 is included to complete the final phase of the Facilities Maintenance Management System for implementation of an integrated facilities and grounds management system serving as a single facilities management system for Fairfax County Facilities Management Department (FMD) and Fairfax County Park Authority (FPCA). The project is in the final phase to fully leverage the latest software functionality and implement a mobile application that will provide field staff real time work order processing and access to the system from anywhere in the County.



Enhanced County Security – \$0.50 M

Support for cybersecurity initiatives and critical security requirements for enterprise-wide IT systems is a long-standing cornerstone of the County's strategic IT policy.

FY 2018 funding of \$500,000 supports Cyber Security Enhancement Initiatives which protect the County's IT assets from evolving cyber threats and provide for mandated regulatory compliance requirements. IT security continues to be a fundamental component of the County's enterprise architecture and strategy. The IT security architecture and practices fuse best practice principles with a hardware and software infrastructure supported by policies, plans and procedures. This project provides for IT security system requirements, replacements and upgrades, consulting expenses, and future security product and service acquisitions to protect the confidentiality, integrity and availability of County systems and information.

Improved Service and Efficiency – \$2.62 M

Projects funded in FY 2018 provide improved service and efficiency in the provision of services to the residents and the business community of Fairfax County. Many of these projects are multi-year initiatives and include projects supporting the County's e-government and public access programs, transparency efforts, strategic human services initiatives, and efforts to improve County processes in order to enhance efficiencies and service delivery.

FY 2018 funding of \$300,000 is provided for the Tactical Initiatives Project. The County's technology strategy is designed to stay responsive in an environment of rapid change with finite resources. This funding addresses unforeseen IT demands due to changes to agencies business processes, non-IT initiatives which have an unexpected IT impact, state/federal mandates, new regulations, and other system upgrades and/or integration priorities.

In FY 2018, funding of \$725,000 supports the County's e-Government Program to meet the high demand for multiple e-government channels, e-transactions services, and accessibility to government information and services. A key initiative of the e-Gov program, is the County's Website Reconstruction Project; a strategic effort that includes the implementation of a new enterprise Web Content Management System, refining the current site's information architecture, redesigning the website with a more modern design, and providing improved search functionality. The goal is to create more topic oriented web presence with improved business delivery model, enhance search engine optimization, generate better information indexing, and eliminate data silos. In addition, this annual funding increment supports improved navigation, web content synchronization, mobile applications, social media integration, transparency, Web 3.0, support of the County's intranet (FairfaxNet), and sustained compliance with Department of Justice (DOJ) Americans with Disabilities Act (ADA).

FY 2018 funding of \$1,000,000 continues support for the Integrated Human Services Technology Project. This is a multi-year strategic initiative for the deployment a unified Human Services IT

architecture supporting the Human Services Integrative Model; a system-wide vision, shared commitment, differences accounted for, shared decision-making, and accountability for outcomes across all Fairfax County Human Services agencies. A holistic approach to addressing needs along the spectrum of crisis to self-sufficiency to sustainability, as well as strong communication, coordination and collaboration components are key factors. The data collected within the human services system helps shape policy within the County and those policies shape future action. The use of technology is important to ensure these policies and actions are based on robust, meaningful data. A Human Services IT Roadmap was developed through a collaborative effort and approved in FY 2017.

FY 2018 funding of \$600,000 continues support for the Consolidated Health Care Services Information Systems (Integrated Electronic Health Record System Project). The goal of this multi-phase project is the acquisition and deployment of an electronic health record system for the Health Department, Department of Family Services, and the Community Services Board. Each of these agencies provides distinct health care services and has unique documentation needs. This project will optimize the potential value of leveraging a common information technology solution with the requisite configuration flexibility to enable these agencies and other health care providers to more effectively collaborate and coordinate the management of health care services for residents.

In lieu of funding in the FY 2018 Budget, funding of \$1,400,000 is anticipated as part of FY 2017 Carryover to continue support for the Planning Land Use System (PLUS) Project. This initiative is a significant strategic investment for replacement and consolidation of a number of legacy and disparate land use systems supporting zoning and development plan review, building permit/license issuance, code enforcement, inspection, and cashiering activities, with an integrated adaptable enterprise solution, and on-going implementation and integration of electronic (e) Plans review capabilities. The legacy systems lack the native agility of modern technologies that can provide a flexible enterprise platform for evolving business process and architecture requirements. The PLUS project will directly support and advance the County's Strategic Plan to Facilitate the Economic Success of Fairfax County, specifically Goal 3: Improve the Speed, Consistency, and Predictability of the Development Review Process; and also support the goals of Fairfax First, a strategic initiative to implement tactical recommendations to improve the speed, consistency, and predictability of the County's development review process and to enhance customer service.

Maintain a Current and Supportable Technology Infrastructure – \$2.00 M

In an ever evolving technology and communications environment, maintaining current and supportable technology architecture is a challenge that must be continually addressed to ensure performance, operability, security and integrity of business operations and information. The County's technological improvement strategy strives to balance business needs that require technology investments with the



desire to adopt contemporary but relevant and supportable technology industry trends, as well as the ability to leverage existing infrastructure. Projects funded in FY 2018 will support the goal of updating and strengthening the technology foundation where practical, and ensure that residents, the business community and County staff have appropriate and reliable access to information and services.

Funding of \$1,696,000 is provided in FY 2018 for the Enterprise Architecture and Support Project supporting strategic infrastructure and expert services for complex multi-phase enterprise-wide business transformation IT systems for County general services, enterprise technology, security and infrastructure, and corporate systems including the County's Enterprise Resource Planning (ERP) and related business systems. This funding supports necessary software upgrades and integration of business application and infrastructure system components to meet both the County's IT architecture and interoperability goals.

FY 2018 funding of \$100,000 supports the Remote Access Project which provides secure remote access to County networks and systems, and delivers improved security, reporting, and data analysis. This project supports telework capabilities, disaster recovery operations, and recognizes the increasing reliance of agency mobile workers on wireless solutions. Enterprise wide standardized access control methodology enables secure identity authentication for authorized access to County networks, data, and systems. Currently over 4000+ users can access County systems remotely, with 3000 able to do so simultaneously.

Funding of \$200,000 in FY 2018 provides for on-going information technology training and certification in recognition of the challenges associated with maintaining skills as technological changes are realized and to ensure that the rate of change in information technology does not out-pace the County's ability to maintain proficiency. As the County's workforce becomes increasingly dependent on information technology, training support is even more essential.



Budget ID Number	PROJECT TITLE	FY 2014 ADOPTED	FY 2015 ADOPTED	FY 2016 ADOPTED	FY 2017 ADOPTED	FY 2018 ADOPTED*
FUND 40091						
2G70-056-000	Public Safety Subscriber Radio Replacement	2,314,500	3,531,352	3,531,352	3,531,352	3,531,352
2G70-059-000	Mobile Computer Terminal	2,314,500	1,616,200	1,616,200	1,616,200	1,616,200
3G70-078-000	E911 Telephony Platform Replacement		2,100,000	2,180,000	2,180,000	2,180,000
3G70-079-000	Public Safety CAD System Infrastructure		1,260,000	1,180,000	1,180,000	1,180,000
	TOTAL FUND 40091	4,629,000	8,507,552	8,507,552	8,507,552	8,507,552
FUND 10040						
2G70-003-000	Oblique Imagery – GIS	146,280		136,000	136,000	
2G70-004-000	Planimetric Data Acquisition – GIS	92,000	162,000	90,000		
2G70-006-000	Information Technology Training	75,000	200,000	100,000	200,000	200,000
2G70-011-000	Automated Board Meeting Records				75,000	
2G70-015-000	DIT Tactical Initiatives					300,000
2G70-018-000	Enterprise IT Architecture and Support	2,500,000	2,900,000	1,800,000	1,800,000	1,696,000
2G70-019-000	Interactive Voice Response (IVR)					300,000
2G70-020-000	Internet/ Intranet Initiatives – e-Government	200,000	675,000	528,000	528,000	725,000
2G70-034-000	Courtroom Technology Management System - Digital Refresh				596,500	690,000
2G70-036-000	Remote Access	100,000	200,000	100,000	200,000	100,000
2G70-040-000	Facilities Maintenance Management					500,000
2G70-041-000	Customer Relationship Management		200,000	400,000	428,500	428,500
2G70-052-000	IT Cyber Security				500,000	500,000
2G70-053-000	Retirement of Legacy Systems	400,000				
2G70-055-000	Volunteer Management System	175,000				
2G70-067-000	e-Summons	175,000				
2G70-069-000	Tax System Modernization – Tax/ Revenue Administration	800,000		450,000		
IT-000003	Data Loss Prevention Project	500,000				
IT-000004	Emergency Management Portal	200,000				
IT-000005	GRC Auditing	750,000				



Budget ID Number	PROJECT TITLE	FY 2014 ADOPTED	FY 2015 ADOPTED	FY 2016 ADOPTED	FY 2017 ADOPTED	FY 2018 ADOPTED*
IT-000007	Enterprise Project Management		200,000			
IT-000009	Participant Registration System		300,000			
IT-000010	Electronic Plan Submission and Review - LDS		600,000			
IT-000011	ePlans - DPZ		400,000			
IT-000012	ParkNet Replacement		600,000			
IT-000014	Sheriff Civil Enforcement System		315,000		200,000	
IT-000017	Enterprise Document Management			450,000		
IT-000018	Enterprise Identity Management			800,000		
IT-000019	PLUS project			1,000,000	1,400,000	¹
IT-000020	Tele-Psychiatry			300,000		
IT-000021	Fire and Rescue and Police Stations Telephone Replacement			270,000		
IT-000024	Integrated Library System				300,000	
IT-000025	Integrated HS Technology ¹				150,000	1,000,000
IT-000026	Diversion First Interoperability ²				150,000	
IT-000027	Integrated Electronic Health Record System ³				150,000	600,000
IT-000028	Geospatial Initiatives					130,740
	TOTAL FUND 10040	6,113,280	6,752,000	6,424,000	6,814,000	7,170,240
	GRAND TOTAL: IT PROJECTS	10,742,280	15,259,552	14,931,552	15,321,552	15,677,792

¹ It is anticipated that in lieu of the FY 2018 budget, FY 2017 Carryover funding of \$1,400,000 will continue support for the PLUS Project.

*Adopted Budget funding reflects new investment for each fiscal year and **does not include** incremental investments made during annual Carryover or Third Quarter Budget Cycles.

3.2 Public Safety

2G70-056-000 Public Safety Subscriber Radio Replacement Project (E-911 - Fund)

Project Description

This project is a technology refresh/life-cycle replacement program for all MHz digital two-way radios (portable and mobile) in use by the Fairfax County Police Department, Fire and Rescue Department, and the Sheriff's Office. The radios replaced were physically 7-9 years old, over 12 years old in terms of current technology, had reached end of life, and no longer met Public Safety needs or critical interoperability with National Capital Region (NCR) neighbors. The new public safety radios have the necessary feature set for encryption of voice traffic, thereby limiting outside scanning and interception of the radio traffic, are compatible with other NCR jurisdictions, and were deployed throughout Fairfax County's Public Safety agencies to maintain operational performance, employee safety, and effective operations in a regional emergency event. Failure to have radio compatibility would compromise mutual aid situations, result in failed response, and increased risk of injury or death to public safety personnel and the public.

Project Goals

This project provided for the replacement of all public safety voice subscriber portable and mobile radios. Successful deployment of the new radios enhances communications security, ensures that public safety users are on the same platform to provide immediate and systematic response to emergencies, maintains performance, availability, reliability, and provides capacity for growth due to the increase in County population and public safety services demands.

Progress to Date

This project was completed with final system acceptance in December 2012. An additional antenna site (Bailey's Crossroads) was added to the System and both the Primary Antenna Control Site and System Master Site were moved from their previous unprotected sites to the Public Safety and Transportation Operations Center (PSTOC).

With the completion of the Radio Upgrade Project, Fairfax County completed the next logical step in the modernization process, which was the replacement of its Public Safety Subscriber Radios. Over 6,000 portable and mobile radios were procured in September 2013. All radios were programmed to proper frequencies and talk groups, tested, and deployed. This project was completed in the fall of 2014.

Project Budget

FY 2018 funding of \$3,531,352 is included for annual increment of a lease payment schedule.

Return on Investment

Keeping the technology current for essential public safety systems is critical to first responder operations, community security and protection of public safety personnel. The new subscriber radios provide end



users with updated equipment with increased functionality and serve as a basis for future growth. Nearly all new infrastructures now support multiple non-proprietary protocols, IP and digital technology, and various types/mixes of mobile radio equipment using fast data transmission speeds. This replacement provides the County with a radio capability that will allow incremental migration to newer technologies in the future. The return on investment is realized by the performance, productivity, and effectiveness of public safety services, with seconds enhancing life/safety results.

2G70-059-000 Mobile Computer Terminal Project (E-911 - Fund)

Project Description

Fairfax County public safety communications relies heavily on mobile data communications for the dispatch of equipment and personnel to emergencies and other non-emergency requests for public safety services. Digital communications are used to allow field units (e.g., police, fire and rescue, and sheriffs) to receive dispatch messages, event notifications, to self-initiate events, make traffic stops, check on licenses and registrations, maintain status for response, and communicate with one another and the Department of Public Safety Communications (DPSC) without the use of voice radio or intervention of a dispatcher at the DPSC. The entire structure of the County's public safety response system, including staffing at the DPSC, is based on the heavy utilization of mobile data communications for critical public safety activities.

Project Goals

This project supports the recurring life cycle replacement of Mobile Computer Terminals (MCT) to ensure this critical equipment is kept contemporary and functional for public safety personnel who respond to emergency and non-emergency requests for services.

Progress to Date

This project supports an on-going program for the replacement of Mobile Computer Technology used by Public Safety personnel. A 5 years replacement cycle was determined to be a reasonable replacement term for the mobile computer fleet. FY 2018 is the 1st year of the fifth round of replacements for the MCT equipment replacement program. The County currently has approximately 1500 MCTs in the public safety fleet, one fifth, or about 300 units are scheduled to be replaced in FY 2018.

Project Budget

FY 2018 funding of \$1,616,200 supports the first year of the fifth round of a replacement cycle established for MCT equipment; or replacement of 1/5 of the mobile fleet.

Return on Investment

In excess of 150,000,000 transactions are currently processed each year via MCTs through the mobile data communications infrastructure and therefore, it is critical to keep this equipment contemporary and available for the many operations utilized by the field personnel. The current fleet has approximately 1500



units including spares. It is anticipated that this number will continue to grow throughout the life cycle replacement of computer equipment as additional functionality is added that can be made available to additional users in the mobile environment.

MCTs keep officers on the street versus behind a desk as they provide an efficient, quick method where the officer can complete reports and perform routine queries from a mobile device in their vehicle. In addition to the many functions currently performed on the MCT units, police officers use the MCT for mobile field reporting. The County has incorporated a field reporting system into records management and integrated it with the CAD system allowing officers to complete investigative reports online from their vehicle with most of the preliminary information downloadable from the event history reports in the CAD system. This enhancement saves countless hours previously expended writing field investigation reports longhand by patrol personnel.

3G70-078-000 E 9-1-1 Telephony Platform Replacement Project (E-911 - Fund)

Project Description

This project supports replacement of hardware and software for the 9-1-1 call processing environment that enables Fairfax County's Public Safety Answering Point (PSAP) to receive and process emergency calls within the boundaries of the PSAP calling area. Due to the life cycle end of the current hardware/ software and termination of maintenance support as declared by the 9-1-1 telecommunications service provider, this project is a required update of the PSAP communications technology environment to continue 9-1-1 call processing functions. Widespread adoption of rapidly advancing technologies like text, video, Voice over Internet Protocol (VoIP), and the saturation of high speed broadband has raised the expectation of 9-1-1 services for the citizens of Fairfax County. Improvements are needed to support new requirements and expectations. Fairfax County's 9-1-1 call processing phone platform currently operates on the traditional vendor telephony supplied platform and equipment that is based on a major change in telephony platforms reaching end-of-life.

Project Goals

This project will support a multi-phase effort to transition the County's core 9-1-1 system architecture to a new supportable platform that is technologically up to date and has more robust functionality to facilitate future requirements and capabilities.

Progress to Date

Phase 1 – In September of 2015, the project implemented the interim Text-to-9-1-1 capabilities in Fairfax County, the first jurisdiction in Virginia, Maryland and the District of Columbia to provide this much needed access to 9-1-1 for individuals who are deaf and hard of hearing.



Phase 2 – The selection of a new vendor for the replacement of 9-1-1 call taking equipment and voice recording equipment in all Fairfax County 9-1-1 centers and associated secondary locations was completed. Project design and implementation began in 2016 and cutover to the new NG9-1-1 equipment at the Fairfax County Alternate Center occurred on January 11, 2017. Implementation of the system in the Towns of Herndon and Vienna and the City of Fairfax has also been completed. Final installation of the equipment at the Fairfax County primary 9-1-1 Center (MPSTOC) was complete in February 2017; transition to integrated Text-to-9-1-1 in the NG9-1-1 platform was completed in March 2017; and incorporation of radio recording within the NG9-1-1 system is planned for the third quarter of 2017.

Phase 3 – Fairfax County was awarded grant funds from the Department of Homeland Security (DHS) to plan and develop the technical specifications for transition to a new NG9-1-1 ESInet (Emergency Services Internet Protocol Network) for 9-1-1 call routing. The County was also awarded VITA grant funds to assist in the implementation and initial transition to the ESInet. An evaluation of vendor proposals for the ESInet is in progress with an award and contract expected by the 3rd quarter of 2017. The new ESInet service will replace the Verizon provided 9-1-1 call routing network in mid to late 2018. Fairfax County will be the first jurisdiction to transition off the legacy Verizon 9-1-1 network; other Northern Virginia jurisdictions plan to use the Fairfax County Contract to also switch. The region's voice 9-1-1 traffic transition is planned for the 2018-2020 period.

During Phase 3, grant funds supported analysis of the legacy 9-1-1 tabular address location information by Fairfax County GIS staff to enable automatic location information from legacy 9-1-1 data to be transitioned into GIS formats that support NG9-1-1 routing of calls on the ESInet.

Project Budget

In FY 2018 funding of \$2,180,000 continues support for the required hardware and software upgrades associated with this strategic initiatives.

Return on Investment

The improved systems for 9-1-1 services will provide enhanced services and capabilities to the citizens of Fairfax County at a high degree of functionality and in a technologically appropriate manner. These technology upgrades strengthen system resiliency and reliability, and establish a technology foundation for implementation of Next Generation 9-1-1 multimedia capabilities such as text, video and photographs. This project will improve system interoperability with other jurisdictions, call overflow with other Public Safety Answering Points, and location accuracy. The introduction of the new 9-1-1 call processing technology platforms will result in cost savings for Fairfax County as specialized proprietary systems are replaced with commercial off the shelf components that will reduce maintenance costs.

3G70-079-000 Public Safety CAD System Infrastructure Project (E-911 - Fund)

Project Description

The Public Safety Computer Aided Dispatch System (CAD), requires a hardware and software replacement life cycle to keep the functionality and capabilities of the system current with updated technology, hardware, improved software and additional required security and functionality. The CAD System is the core technology supporting the intake and dispatch response functions for all Fairfax County public safety agencies including Police, Fire and Rescue, Sheriff, and the Department of Public Safety Communications (DPSC 9-1-1 Center) in their core mission of keeping Fairfax County and its citizens safe. It is used by the call takers and dispatchers to process all calls for service received on 9-1-1 and other requests for emergency and non-emergency services in Fairfax County, as well as for mutual aid interoperability. This project supports replacement of the supporting hardware infrastructure and required supporting software licenses, workstations and associated licenses, and the CAD system.

Project Goal

This project's goal is to refresh/update the current Public Safety 9-1-1 CAD system and components: equipment (hardware) and applications (software) over a five year plan, and baseline a rationalized replacement structure for the future. The Fairfax standard for IT foundational and workstation equipment is five years, keeping in mind usability, maintenance and supportability. This also facilitates planning as software solutions evolve in the marketplace. Keeping the infrastructure current allows the system to sustain better performance, reduce risks for equipment failures, keep pace with changing technology capabilities, and increasing security requirements.

Progress to Date

Staff from the Department of Public Safety Communications, public safety agency stakeholders, Department of Information Technology and advisory experts have researched the issues associated with sustaining 9-1-1 Center performance, best practices for hardware replacements, security and resilience, state of the industry and readiness to operationalize and integrate next generation 9-1-1 needs.

Each phase of the proposed project plan addresses the replacement for the components and related software versioning processes with activities including identification, purchase, installation, software license obligations, and ultimate transition to a new CAD solution. The hardware replacement schedule will be coordinated with the partner agencies to ensure minimal impact with other Public Safety projects that may be occurring at the same or similar times.

Project Budget

In FY 2018 \$1,180,000 supports the fourth year of the five year replacement plan established for this project.



Return on Investment

Public Safety agencies rely on the CAD System to provide mission critical lifesaving and property protecting services to Fairfax County and the surrounding areas. By replacing hardware in a timely fashion, the County safeguards against equipment failure and legacy vendor abandonment of aging technology that could potentially result in service interruptions with grievous consequences. This project incorporates the requirements needed to upgrade and replace all CAD system components, including software versioning, over a five year period to keep the system contemporary and upgraded and to allow for continued use by the Public Safety user community. The need for improved CAD system capacity and functionality will continue into the future as a necessary funding requirement. Using a phased, life cycle approach insures that required funding is spread out over a five year period and thus relieves the County of the impact of a major system overhaul in any one fiscal year.

2G70-007-000 Electronic Records Management System Project- Juvenile and Domestic Relations District Court (JDRDC)

Project Description

Fairfax County's Juvenile & Domestic Relations District Court (JDRDC) and DIT have partnered with the Supreme Court of Virginia's (SCV), Office of the Executive Secretary, to implement a Case Imaging System for the scanning, retention, electronic viewing and submission of court documents. The Juvenile and Domestic Imaging System (JDIS) is a custom built SCV solution utilizing off-the-shelf software, modified by SCV that interfaces with and exchanges data between the newly implemented Juvenile Secure Viewing System (JSVS) and the existing Juvenile Case Management System (JCMS). JSVS provides remote access to JDIS cases containing scanned documents to remote court services locations throughout the County. This shared initiative will ultimately benefit all courts, related agencies and jurisdictions throughout the Commonwealth of Virginia.

Project Goals

The JDIS project seeks to reduce or eliminate labor intensive and time consuming hard copy record searches, retrieval and re-filing processes, and provides simultaneous and instant access to court records with improved security. The JDRDC will realize improved efficiencies and reduced costs associated with storage of paper documents, and safeguards documents with electronic backup capabilities.

Progress to Date

Phases 1, 2, and 3A of the project are in production; and a large portion of Phase 3B is also complete. The application captures juvenile and adult criminal case types through the scanning and assignment of case file documents. Once the scanned documents are assigned to the appropriate case, the documents can be distributed through a number of queues to both the JDRC Clerk's Office and multiple Court Service Units (CSU). Additional functionality also includes enhanced expungement processing.

The remaining portion of Phase 3B includes Juvenile Secure Viewing System remote secure submission of documents from all CSU locations to the Clerk's office and the relocation of the queues, report logs and notifications from JDIS to JSVS. The Final phase will offer public viewing of case documents, automated quality assurance processes and reporting, and interfaces with the future Sheriff's Advanced Civil Enforcement System (ACES).

Project Budget

Additional funding is not required in FY 2018.

Return on Investment

This project improves public access to court records, enhances data security, and significantly reduces staff time dedicated to locating missing files, retrieving and re-filing court records. The system also shrinks the physical storage space required for court files, improves response time for customers and court staff at the Records, Fines and Costs counters, and reduces the incidence of misplaced court files and documents necessary for the continuity of courtroom proceedings. The Supreme Court of Virginia is in the process of rolling out this system to other Juvenile Courts throughout the state.

2G70-021-000 and 2G70-022-000 Circuit Court Technology Project

The Fairfax Circuit Court is nationally-recognized for its delivery of public service, and continues to actively pursue state-of-the-art technology solutions to improve both court efficiency and the court-customers' experience. This project covers multiple facets of Circuit Court operations and receives funding through the Commonwealth of Virginia's Technology Trust Fund.

Project Description

Court Automated Recording System (CARS) / Court Public Access Network (CPAN) – The Clerk of the Fairfax County Circuit Court is responsible for providing citizens with reliable, timely, and accessible public records. More than 49 million court records have been digitized into the Court's Public Access Network (CPAN) which is a web-based, online digital image retrieval system. CPAN offers subscribers 24 hours a day, 7 days a week online access to land records, judgments, marriage licenses, trade names and probate record images, dating from as early as 1742 to the present. CPAN has over 2,000 subscribers who are located domestically in over thirty states and internationally. Subscribers include citizens, real estate title examiners, law firms, mortgage companies, banks, media outlets, and federal, state, and local governmental agencies.

Case Management System (CMS) – The Clerk of the Fairfax Circuit Court is responsible for receiving and maintaining all court records for felony prosecutions and civil litigations in Fairfax. The Clerk files, indexes, and manages the complete life-cycle of a court case and its pleadings, from case-initiation (Search Warrants/Indictments in criminal prosecutions and Petitions/Complaints in civil actions) to the compilation of the appellate record for submission up to the Court of Appeals and the Supreme Court of Virginia.



All pleadings, criminal discovery, trial evidence and post-trial motions, as well as Orders of the Court, are kept in perpetual record by the Clerk's Office. This kind of dynamic public-record keeping, held in perpetuity, is a ripe environment for the efficiencies today's digital technology has to offer. The Clerk's current Case Managements System (CMS) automates case -processing through the Circuit Court, allowing for real-time case indexing, docketing, trial calendaring, data-integrated document - generation and processing, trial/hearing calendaring, disposition-entry, account ledgering and the running of statistical reports.

Project Goals

Circuit Court modernization initiatives aim to make the Clerk's over 800-Virginia Code-mandated duties more efficient and cogent, using software programs and integrated systems, that ultimately better-serve Fairfax court-customers, protect important Constitutional protections, like due process and speedy trial rights. As the Court of Record for Fairfax, technology will continue to help the Clerk's Office preserve Fairfax's public history.

Progress to Date

- Deployment of Phase 1 of a collaborative project with the Commissioner of Accounts of the 19th Judicial Circuit and the Circuit Court's Probate Division, to electronically exchange, maintain and record administration of estate documents and relevant data.
- Replacement of the 10 -year old, Microsoft Windows-based case management system, with a fully - integrated web browser -based Case Management System, which supports civil and criminal case processing.
- Deployment of the Court Document Recording System to replace the existing product that has been used to manage the document processing for over 15 years. This application incorporates scanning, indexing, image -enhancement and verification for various court documents, such as deeds, deeds of trust, mortgages, marriage licenses, wills and judgments. This system is designed to maintain and streamline current recordation of documents received, both electronic and in paper.

Other accomplishments include development and deployment of the Circuit Court's Land Records Recording System, including document imaging; (with comprehensive redaction capabilities); implementation of the CPAN retrieval system, use of an automated jury management system (which serves as a system clearinghouse for the 60,000 Fairfax citizens who make-up the Court's annual jury pool); deployment of a Case Management System which actively manages the Court's civil and criminal dockets; development and implementation of the Clerk's "Paperless Probate" process, which makes a difficult time in a family's life, swifter and more efficient; development and implementation of a streamlined Marriage License Application, which utilizes scanners to import data from customers' operator licenses; and implementation of electronic docketing display, which serves as directional signage for the public, as they navigate the large courthouse, to find their courtroom. These systems provide a platform and foundation for additional capabilities, as the Court's business requirements evolve. Technological system updates, which are critical to platform vitality and customer-service delivery, are also addressed through this fund.

CARS

- Digitized back-file images with associated indices and implemented web-based CPAN, 1999
- Scanned, indexed, and stored all land record documents for electronic processing, 2000; redesigned processes to include automated cashiering and scanning capabilities, to update the public record in a more efficient manner 2001; electronic filing prototype for mortgage releases using the ACH transfer of funds, 2002; implemented Public Services cashiering system, 2005; automated the Administration of Estates System, 2006; incorporated the use of commercial credit cards for payment of fees and taxes, 2007; land records Electronic Filing System (EFS) made available to the public, 2010; integration of automated scanning

in Virginia's Marriage License Application process, 2010; integration of redacted data and processes mandated by Virginia's General Assembly, 2012; development of the Online Marriage Pre-Application, an online resource used by 50% of all marriage license applicants in Fairfax (use of the application has significantly reduced customer wait -times;); implementation of the Electronic Filing System which now accounts for 60% of all land transactions recorded in Land Records, thus reducing staff workload; and the automated document recording system which provided the needed scalability to handle the peaks and valleys of the real-estate "seasonal" workload, which is driven by Fairfax's dynamic and fluctuating, housing market

CMS

Provided web-based availability of court information on CPAN in 2005; implemented electronic docket displays in 2006; Circuit Court successfully migrated to a web-based enterprise case management system in 2012, implemented the Clerk's "E-Decree" program, which e-notifies attorneys of record, and litigants when final Orders are entered. The CMS migration to web-based management also offered the following enhancements:

- Deployed court-wide scanning of all case documents with on-going day forward redaction capability.
- Initiated the use of Work Queues to streamline work processes and work assignments, within Case Processing and Courtroom Operations Divisions and incorporated e-transfer of final Orders of the Court to Counsel of Record, litigants, and sister-agencies of the Commonwealth.
- Developed a Protective Order interface with the Supreme Court of Virginia: Office of the Executive Secretary, to communicate injunctions in real-time.
- Established a Report Service Library, where custom-built SQL-reports are kept for both on-going and ad-hoc statistical Report-Requests.

Planned Project Schedule

- Requirements gathering and development to modernize the Land Records Electronic Filing System.
- A Request for Proposal (RFP) has been issued by the Circuit Court for a fully-integrated Court Management System, which will include: a case management system, document management system, financial management



system, electronic filing portal and electronic filing fee payment system, a digital trial practice system, and a judicial dashboard. The RFP was issued on March 17, 2017 and is scheduled to close on June 1, 2017. Proposals will be evaluated by a Selection Advisory Team (SAC)

and a Technical Advisory Team (TAC) and demonstrations may be scheduled. Upon contract-award, negotiations will be led by the County's Department of Procurement and Material Management and the Fairfax County Attorney.

Project Budget

Annual funding from Virginia State Technology Trust Fund revenue (mandated by the Code of Virginia specifically for Circuit Court Technology and which cannot be used for any other purpose), CPAN subscription revenue, Administration of Justice revenue, and agency funds support technology initiatives in the Circuit Court.

Return on Investment

CARS provides immediate electronic access to CPAN for over 2,000 commercial customers, making all land records, deeds, deeds of trust, liens and judgments on every parcel of land in Fairfax. In addition to citizen-customers, CARS serves federal, state and local agencies, particularly sister-agencies such as the Fairfax County Department of Tax Administration (DTA), the City of Fairfax Tax Assessor's Office, The Fairfax County Geographic Information Systems (GIS) and the Fairfax County Department of Public Works and Environmental Services (DPWES).

When awarded, the Court Management System's imaging, electronic filing, electronic-certifying and payment system portal, digital trial practice and judicial dashboard capabilities will provide increased efficiencies in the processing and trial management of the Court's 25,000 new cases each year. Multiple parties will be able to access electronic case files simultaneously, and e-file pleadings and other documents from their firms, at any hour of the day or night, reducing road-travel to the courthouse. Potential interfaces with other jurisdictions will allow the exchange of electronic documents and/or data and eliminate existing manual processes between jurisdictions.

2G70-034-000 Courtroom Technology Management Systems - Digital Upgrade

Project Description

Fairfax County's Court Technology Office (CrTO) has completed research and designs for the "next generation" digital courtrooms necessary to upgrade the existing Courtroom Technology Management System (CTMS) launched in 2008 to provide electronic evidence presentation, video conferencing and systems management for all three Fairfax County Courts. In less than 10 years, technology has changed significantly; new digital design is necessary to replace obsolete analog hardware, include newer, digital components for courtrooms undergoing renovation; and the retrofitting of CTMS in 18 existing courtrooms. Analog equipment and repair parts are being discontinued, and existing hardware components require

replacement with digital hardware. Upgrading to digital hardware is not a “plug and play” fix, and requires new cabling, connections and new software code.

Project Goals

The primary goal of this project (CTMS2) is to upgrade the high-tech courtrooms in Fairfax County Courthouse to an all new digital platform necessary to meet industry standards. The digital upgrades will support Bring Your Own Devices (BYOD), upgraded digital connections for HDMI and DisplayPort connector types, annotation enhancements, upgraded touch panel displays, and network-managed video services, while retaining existing CTMS functionality. CTMS2 will continue to improve citizens’ access to the Courts, facilitate trials and hearings in the most effective and efficient means possible, allow for all three Courts to share common resources, and provide for the flexibility and adaptability required to incorporate future changes in technology and court proceedings.

Progress to Date

In September 2016, the Court Technology Office (CrTO) successfully implemented an upgraded Courtroom Technology Management System digital solution, CTMS2, in four newly renovated courtrooms. The CTMS2 digital blueprint will be deployed to future renovated courtrooms and to upgrade existing CTMS1 courtrooms. A multiphase deployment to upgrade 18 existing CTMS1 courtrooms to the digital platform is necessary, commencing during FY2017 and is planned to continue through FY 2020. The digital migration requires careful planning and scheduling as only a limited number of courtrooms can be “out of commission” at one time. The digital retrofit is anticipated to take eight to twelve weeks per courtroom, planned over multiple fiscal years.

Milestones and planned implementation are:

- Courtroom construction renovations and digital technology infrastructure design with the Department of Public Works and Environmental Services and contracted architect – Completed January 2015
- Courtroom renovations – Commenced September 2015
- CTMS 2 digital design – Completed January 2016
- FY 2017 to FY 2018 - Upgrade 5th Floor Circuit Courtrooms
- FY 2018 - Upgrade 4th Floor Circuit Courtrooms
- FY 2018 - Upgrade 2nd Floor GDC Courtrooms
- FY 2018 to FY 2019 - Upgrade 3rd Floor JDRDC Courtroom
- FY 2019 to FY2020 - Upgrade 1st Floor GDC Courtrooms

Project Budget

FY 2018 funding of \$690,000 will continue support for this initiative.



users with updated equipment with increased functionality and serve as a basis for future growth. Nearly all new infrastructures now support multiple non-proprietary protocols, IP and digital technology, and various types/mixes of mobile radio equipment using fast data transmission speeds. This replacement provides the County with a radio capability that will allow incremental migration to newer technologies in the future. The return on investment is realized by the performance, productivity, and effectiveness of public safety services, with seconds enhancing life/safety results.

2G70-059-000 Mobile Computer Terminal Project (E-911 - Fund)

Project Description

Fairfax County public safety communications relies heavily on mobile data communications for the dispatch of equipment and personnel to emergencies and other non-emergency requests for public safety services. Digital communications are used to allow field units (e.g., police, fire and rescue, and sheriffs) to receive dispatch messages, event notifications, to self-initiate events, make traffic stops, check on licenses and registrations, maintain status for response, and communicate with one another and the Department of Public Safety Communications (DPSC) without the use of voice radio or intervention of a dispatcher at the DPSC. The entire structure of the County's public safety response system, including staffing at the DPSC, is based on the heavy utilization of mobile data communications for critical public safety activities.

Project Goals

This project supports the recurring life cycle replacement of Mobile Computer Terminals (MCT) to ensure this critical equipment is kept contemporary and functional for public safety personnel who respond to emergency and non-emergency requests for services.

Progress to Date

This project supports an on-going program for the replacement of Mobile Computer Technology used by Public Safety personnel. A 5 years replacement cycle was determined to be a reasonable replacement term for the mobile computer fleet. FY 2018 is the 1st year of the fifth round of replacements for the MCT equipment replacement program. The County currently has approximately 1500 MCTs in the public safety fleet, one fifth, or about 300 units are scheduled to be replaced in FY 2018.

Project Budget

FY 2018 funding of \$1,616,200 supports the first year of the fifth round of a replacement cycle established for MCT equipment; or replacement of 1/5 of the mobile fleet.

Return on Investment

In excess of 150,000,000 transactions are currently processed each year via MCTs through the mobile data communications infrastructure and therefore, it is critical to keep this equipment contemporary and available for the many operations utilized by the field personnel. The current fleet has approximately 1500



Project Budget

FY 2018 funding is not required; anticipated revenues from the mandated court fees (details below) will directly support e-Summons implementation in Fairfax County.

(In July 1, 2014 the Virginia General Assembly added new provisions to VA state law (Virginia Code § 17.1-279.1) which permits the assessment of an additional \$5 as part of the cost of each criminal and traffic court in each localities district and circuit courts. The Fairfax County Board of Supervisors approved an amendment to Fairfax County Code to adopt the state law. Effective on August 1, 2014 as specified by the legislation all funds generated from the new fees are to be used solely to fund software, hardware, and associated equipment costs for the implementation and maintenance of an electronic summons system in Fairfax County. Funding from the ordinance will also support the purchase of new peripheral equipment such as handheld devices, portable printers, driver's license scanners, and barcode readers. All funds received will be posted to the e-Summons project as part of regularly scheduled budget reviews.)

Return on Investment

E-Summons is an automated solution that enables police officers to issue traffic tickets safely and more efficiently with greater accuracy, reducing manual processes, and eliminating data entry errors that can have potentially serious repercussions for the public, courts and the police department. A fully integrated e-Summons solution eliminates redundant data entry, reduces duplication of effort between agencies, and streamlines court scheduling and docketing processes creating multiple opportunities to improve existing operations. Additional benefits include near real time electronic access to traffic case information for payment of traffic fines.

IT-000013 Police Records Management Refresh Project

Project Description

This project supports replacement of the current Police Department Records Management System (RMS) as the existing software has reached its end-of-life and is no longer supported by the vendor. This project will impact nearly all aspects of police work and police information collection.

Project Goal

This project aims to replace the current Police Records Management system (ILEADS) with the next generation case management solution that fully utilizes and supports the present and future police department needs and business processes, maintains close integration with the current 9-1-1 Dispatch (Computer Aided Dispatch – CAD) system, and eliminates existing system limitations including persistent deficiencies in connectivity with mobile units. The lack of a persistent connection between the police vehicles and the database caused performance issues when officers interact with citizens and transmit reports.



Progress to Date

A substantial upgrade to the current I/LEADS Records Management System (RMS) was accomplished in December of 2015. The Development Team focused on business process analysis and application configuration following which the team will transition to the development of a training program to train over 2500 end users. The project will move into the implementation phase following end user training, with cutover scheduled for early FY 2018.

Configuration and implementation planning also continues with the next generation report management system, replacing the legacy application. This includes implementation of Field Based Reporting (FBR) system, utilized by officers in the field to enable fast and convenient data entry and report submission, which integrates with Police RMS and CAD, thereby eliminating duplicate data entry and decreasing reporting turnaround times. Improvements to the FBR system are underway in anticipation of deploying a more robust solution in early FY 2018.

Project Budget

Additional funding is not required in FY 2018. As part of FY 2014 Carryover, funding of \$1,000,000 was provided for replacement of the Police Department's current Records Management system.

Return on Investment

A modern Records Management System (RSM) is a critical necessity in large police departments across the country. A new RMS system will allow Fairfax County police officers to more efficiently respond to incidents, issue electronic summons and complete reports on the scene of incidents rather than waiting to enter case information at a field office, station, or other locations. A modern system also assures more accurate, timely, reliable and accessible information on events, and enables the Police Department to more efficiently act upon incidents, from initial response through tracking, investigation and reporting.

IT-000014 Sheriff Civil Enforcement System Project

Project Description

The Office of the Sheriff, in collaboration with the three Fairfax County Courts (Circuit Court, General District Court, and Juvenile and Domestic Relations District Court) and the DIT Court Technology Office is implementing an Advanced Civil Enforcement System (ACES) to automate existing civil enforcement business processes and replace the current module in the Police RMS system slated to be decommissioned in early FY 2018. The new system will include interfaces between the Sheriff's Office and the Courts to meet the demands of processing large volumes of service documents on a daily basis, provide for enhanced security, reporting, statistics, and a civil records repository with automated backup features. The system will introduce a mobile solution and interfaces with other County agencies including DIT/GIS, Department of Tax Administration, and the Commonwealth Attorneys' Office.

Project Goal

The Sheriff's Office is required by Virginia Code 8.01-293 to execute civil processes within their jurisdiction. The goal of this project is to replace the current civil enforcement module in the Police Records Management system with a comprehensive electronic civil enforcement solution.

Progress to Date

The ACES project scope was defined and approved; Phase 1 requirements are complete, and following extensive research and analysis, a final scope of work and contract were finalized and project kick off occurred in third quarter of FY 2017. Phase 1 includes automation of the core civil enforcement processes, barcoding, electronic signatures, reporting, statistics, GIS and mapping, and basic mobile functionality. Phase 2A includes public/private web access, and a robust mobile solution utilizing the existing infrastructure. Phase 2B includes bi-directional interfaces between ACES and the three Courts' case management and imaging systems.

Project Budget

FY 2018 funding is not required.

Return on Investment

A core function of the Sheriff's Office is to ensure timely service execution for the Courts. When fully implemented, the new Advanced Civil Enforcement System (ACES) will automate civil enforcement processes, provide timely and efficient processing and viewing of civil records, bi-directional interfaces with the Courts and other agencies, reduced manual processing and delivery of service documents, and enhanced efficiencies by electronically processing, distributing, and tracking service documents. The system will also incorporate electronic signatures, barcoding, and implement a mobile solution using existing infrastructure. ACES will minimize risk of misplaced or damaged files, provide reliable back up, and consistent retention and secure file storage. Planned interfaces with the Courts will promote consistency and standardization between the Sheriff's Office and the Courts.

IT-000015 Commonwealth's Attorney Case Management System Project

Project Description

This project will replace an end of life legacy case management platform in Fairfax County's Commonwealth's Attorney's Office with a modern software application and provide for supportable technology hardware, software and infrastructure to improve operational efficiency and streamline business processes.

Project Goal

The goal is to replace the current legacy case management system in the Commonwealth's Attorney Office with a modern comprehensive case management software system that will provide improved



workflow tools, streamline processes, provide enhanced accountability, and improve office efficiency. Other components include conversion of all legacy data, the ability to scan arrest warrants, and interfaces to other County departments such as the Police Department.

Progress to Date

Following procurement processes, a contract was awarded to the selected vendor, project kick off occurred in the second quarter of FY 2017; system implementation will continue in FY 2018.

Project Budget

This project was funded at FY 2014 Carryover. Additional funding is not required in FY 2018.

Return on Investment

An updated case management system will significantly improve management and tracking of a large volume of criminal cases handled by the Fairfax County Commonwealth's Attorney's Office. Improvements such as barcode scanning of arrest warrants, auto-generated legal documents, and the automated syncing of attorney calendars will dramatically reduce data entry by office personnel. Generating real-time case assignment reports showing the number of cases assigned, types of cases, and where cases fall into the case life cycle will streamline the current task of case assignment.

IT-000021 Fire and Rescue and Police Stations Telephone Replacement Project

Project Description

This project supports replacement of legacy telephone systems in all Fairfax County Fire and Police Stations. The telephone systems were installed in 2001, have reached end of life, and are no longer supportable. The project will transition all Fire and Rescue and Police stations phone systems to the County's current enterprise voice platform. The stations will benefit from all common enterprise telephone features such as extension to cellular phones, recording calls, and detailed automated number and locator information, station information to public safety answering points (PSAP), forwarding of voice mail, integration of individual direct inward dial numbers assigned, desk phones, and cell phones. Once integrated into the enterprise voice system, a police officer or fire fighter can be reassigned to a different station without changing phone numbers. All public safety sites will be linked together through the enterprise voice platform. Additionally, the planned transition to the County's enterprise telecommunication platform will meet state the mandated requirement that all emergency calls from a phone station provide PSAP with sufficient location identification information to ensure emergency response.

Project Goal

The goal of this multi-phase project is to provide better internal communications by placing all public safety stations on the enterprise voice platform utilizing the County's I-NET and streamlining public safety

stations voice communications by using common technology tools such as computers, telephones and wireless integration.

Progress to Date

This is a multi-year project planned for FY 2016 - FY 2018. To date, the transition of all Police Stations and six Fire Stations have been accomplished, with the stations operational on the County's enterprise voice platform. Stations are able to perform internal dialing across the County-owned INET infrastructure, use common features and functionality of the voice network and reduce recurring cost by eliminating high cost legacy telephone company circuits. FY 2018 plans are to complete the project with transition of the remaining 13 fire stations to the enterprise platform.

Project Budget

FY 2018 funding is not included.

Return on Investment

In addition to communications efficiencies and compliance with state mandates, transitioning the current legacy phone systems in Fire and Police stations to the County's enterprise platform with contemporary voice and phone technologies will provide the County substantial savings in recurring maintenance and operational expenses. Once fully transitioned to the enterprise platform, the County will realize an estimated \$35,000 savings in annual maintenance, and \$107,000 in annual operating expenditures. Also station equipment will fall under the terms and conditions of the enterprise contract which provides for a two hour response time for voice service calls. Streamlining the voice architecture, improving internal communications, increasing staff productivity, reducing recurring costs, and maintaining serviceability of equipment are all priorities of this project and will provide significant return on investment to Fairfax County.



3.3 Corporate Enterprise

2G70-011-000 Automated Board Meeting Records Project

Project Description

This project streamlines, automates, and supports mobile-enabled submission, preparation, and delivery of the Board of Supervisors Meeting Agenda and Board Book Package by converting a manual paper-exclusive process to an electronic format.

Project Goals

This initiative is sponsored by the Board of Supervisors and the County Executive to enable the Office of the County Executive and the Clerk to the Board to electronically create the agenda, supporting documentation, record Board of Supervisor meeting matters and post documents on-line for accessibility. This project will significantly improve the quality and efficiency of producing the board packages for the Board of Supervisors and associated committees and subcommittees.

Progress to Date

Easy to use and secure Board meeting management software has successfully been deployed to support the Board of Supervisors meetings, subcommittee meetings, and other County Boards, Authorities and Committees (BACs) such as Retirement Board, Board of Equalization of Real Estate Assessments, and Water Authority.

In FY 2018 this project will continue deployment to additional Board subcommittees and BACs. To date, this project has eliminated printing, assembly, and transportation costs, increased accessibility via PC, laptop, iPad, and provided better management and distribution of board book revisions.

Project Budget

FY 2018 funding is not required.

Return on Investment

This project increases efficiency and streamlines the production of the Board of Supervisors' package by providing the information and supporting materials on-line, offering Board members an efficient way to review meeting material electronically, increases accessibility, and provides for better management and distribution. Additional benefits are improved productivity in preparing and submission of agenda items, reduction in manual paper intensive processes, as well as reduced space requirements for maintaining large paper copies for Board offices and the Clerks' Office. Cost savings are achieved from implementing electronic board-books by eliminating the print, labor, and transportation costs that were required to produce, assemble, and physically deliver the large multi-volume board books. In addition, revisions to board book content can be updated easily and made available instantly so that a reprint and redistribution of hard copy is not necessary.

2G70-019-000 Public Access Technologies – Interactive Voice Response Project

Project Description

The Interactive Voice Response (IVR) technology program develops custom interactive telephone applications that can access and update data in a variety of County databases, in addition to providing static information in a timely and convenient manner. This project was established at the request of the Board of Supervisors “to enable the County’s customers to conduct business with the County wherever and whenever it is convenient for the customer”, in particular for citizens without internet access. IVR is one of the foundational programs for enhancing public access to government information and business transactions.

Project Goals

The primary goal is to continue the application of text-to-speech technology for certain applications aligned with e-Government goals. Interactive Voice Response enhancements include the continued integration of Web and IVR via XML technology for public use.

Progress to Date

The IVR team developed and distributed a Request for Proposal (RFP) for a new Interactive Voice Response system, a contract was awarded in FY 2016. To date the project successfully migrated the General District Court's IVR application for traffic payments. In FY 2017 phased implementation continued for the Department of Tax Administration (Personal Property, Real Estate, and Real Estate Information lines), and Circuit Court Juror Information lines; FY 2018 plans include Fairfax County Electoral Board Information Line; migration of additional agencies is planned through FY 2020.

The following County agencies are primary users of the IVR system:

County Executive, Office of	County Services Information Line
	Medical Registry – Special Needs
	OPA Survey Line (Seasonal)
Courts	Courts Information Line
	Traffic or Criminal Violation Prepayment
	Juror Information
Fairfax-Falls Church Community Services Board	Community Service Board Survey
Family Services	Coordinated Services Planning Survey
	Register for Institute For Early Learning
Health Department	Health Department Information Line
Housing and Community Development	Inquire Affordable Housing Waiting List
Human Resources	County Job Line
Information Technology	IT Service Desk Information Line
Library, Fairfax County Public	Library Information Line

Police Department	Victims of Crime Information Line
Public Works and Environmental Services	Building Plan Review Information Line
	Inquire Building Permit/Plan/Inspection Status
	Schedule/Cancel Building Inspection Requests
	Schedule/Cancel Special Collections (Trash Pickup)
Tax Administration	Real Estate Information & Tax Payment

Project Budget

FY 2018 funding of \$300,000 provides for continued support of the IVR program. This initiative requires on-going support from e-Gov and Telecommunications staff to support and expand the IVR application capabilities in additional business areas and implement enhancements.

Return on Investment

Public access technologies such as the IVR expand citizen access to County information and services; minimize staff resources needed to provide basic information, and allow staff deployment to more complex and specialized tasks. The County's IVR system currently answers more than a million calls annually. The system is available approximately 24 hours a day to interact with citizens, providing an additional option for conducting business with the County after regular business hours. By handling the more routine calls, the IVR allows staff to concentrate on those calls that are most in need of personal attention. It also allows access to a great deal of information after regular business hours.

2G70-020-000 Internet/Intranet Initiatives Project – e-Government

Project Description

This project supports initiatives that improve public accessibility to government information and services. A comprehensive approach is employed to ensure efficient infrastructure capable of supporting multiple business solutions. In addition to enhancing customer service for availability anywhere, anytime, public access technologies reduce staff involvement in providing basic information and transactions, thereby allowing personnel to perform more complex tasks and respond to requests for more detailed or specialized information. Internet/intranet initiatives provide significant and wide-ranging opportunities to use technology as a means of making information more readily available to the public. Initiatives include research and development of emerging technologies, expansion of Web applications, improvements in search and navigation, integration with internal systems and other public access channels, and sustaining infrastructure.

Project Goals

The project's vision is to provide new information and services on all platforms, while continuing to build on existing information architecture. The planned functionality is delivered in support of the County's taxonomy of information and services, using a single supporting infrastructure. The solution is based

upon a single content repository for all platform and agencies. The repository enables various features of content management to provide accurate and reliable information, provides additional search capabilities on the public web site, and enables information sharing. The project includes implementing standards and processes for information engineering so that the same application and data is used County-wide in the development of Web content and applications.

Progress to Date

The County's Public Web site has been an extraordinary success and has received national recognition. The site receives approximately 19,311,840 visitors, which equates to about 61,095,040 page views for FY 2016. Approximately 55 County agencies have a presence on the site. The functionality of the site has expanded significantly with the addition of an online discussion tool (Ask Fairfax!) to enable citizen interaction with government on various topics, mobile version of the County website with mobile and iPhone applications to list a few. The County website is also translated into 12 languages using machine translation powered by Google. In order to empower public services and affirm County's strategic vision and goals, the website has been enhanced with new and updated interactive features and online applications. In an effort to improve website accessibility, all pages on the public website are tested for compliance with [Section 508 of the Rehabilitation Act of 1973](#) and the Americans with Disabilities Act by passing through the County's automated compliance checking tool.

Implementation of a new enterprise **Web Content Management System** currently underway, is a major initiative of the e-Gov program. This effort includes refining the current site's information architecture, redesigning the entire website with a more modern design ensuring seamless accessibility in mobile devices, and improving search functionality. In addition to installing and configuring the new system to meet requirements, this major effort involves a complete review of the current web content for 55 agencies and reorganizing information to make it a more user centric site that promotes ease of use and delivers more online services for public consumption. The goal is to create more topic oriented web presence with improved business delivery model, enhance search engine optimization, generate better information indexing, and eliminate data silos thereby promoting transparency on the County's web site.

In order to continue to empower public access to service while affirming the County's strategic vision, Fairfax County has pioneered the implementation of governmental services through various mobile devices like iPhone/iPad, Android and Blackberry. In enhancing the County's long standing goal that our community should access their government 24/7 without walls, doors or clocks, Fairfax County now places government in the palm of their hands with the introduction of efficient and cost effective mobile apps and services.

Fairfax County Government's mobile app:

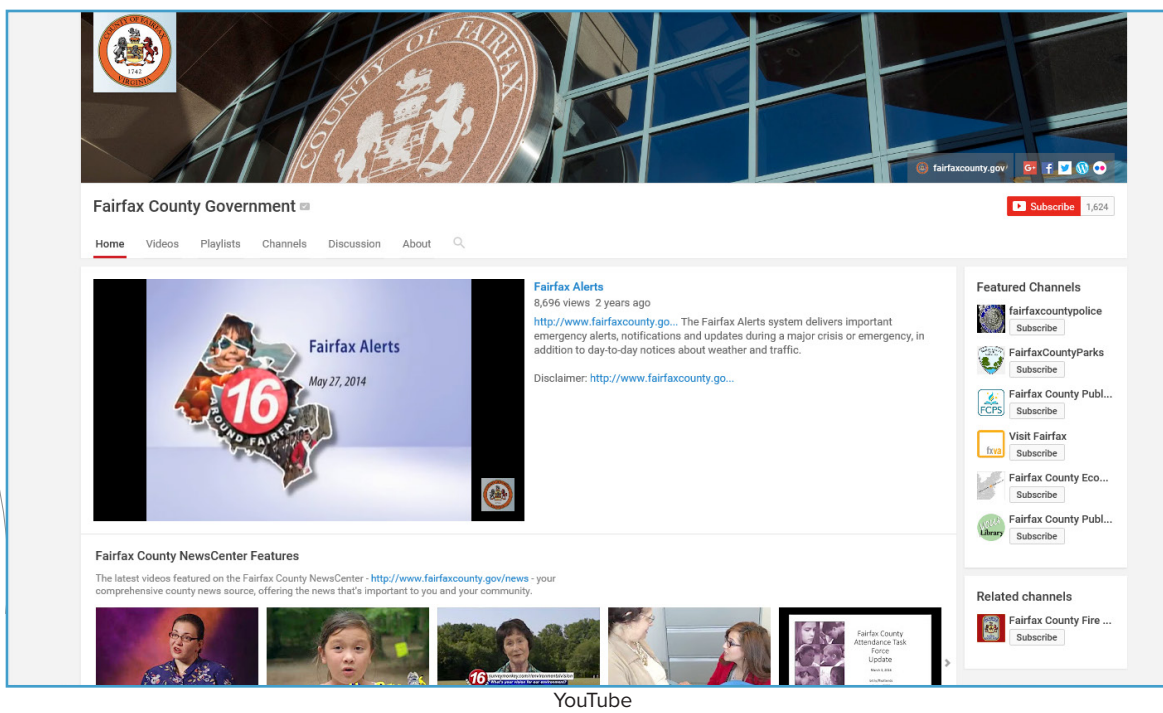


- Enable citizens instant connectivity to their government
- Provide the benefit of getting services and information from anywhere at any time by delivering information in a more conveniently accessible platform
- Enhance the adoption of online governmental services by reaching a larger and wider user base

In addition to a mobile website, the public can download the official Fairfax County application on their smartphones and tablets for emergency information, news headlines, one-touch calling through a contact directory, GPS maps, social media links, transportation resources and more at

<http://www.FairfaxCounty.gov/topics/mobile>.

The ongoing strategy includes ‘transparency’ and ‘sharing’ which has become an integral part of the Web experience. Recognizing that online collaboration and social media are essential business function in today’s rapidly changing world and key to improving citizen-to-government networking, Fairfax County offers multiple channels such as Facebook, Twitter, YouTube, Instagram, SoundCloud and Flickr for public engagement with County government on various topics during emergencies and otherwise. It also advances the County goal of creating a culture of engagement, boosts County operations and furthers our business mission with residents. Using social media tools is a proven and acceptable way to enhance government transparency and encourages a two-way dialogue with the public which augments the standard website.



In addition to the use of numerous County-developed cross-agency applications like RSS (Really Simple Syndication feeds), Ask Fairfax!, e-mail subscriptions to improve citizen-to-government networking, open source tools like Slideshare (presentation sharing), Google maps (event maps), and Ideascale (social voting) have been leveraged. These are integrated together and come under the umbrella of NewsCenter which is the County's one-stop news shop.

The County has about 27 official social media sites/accounts on Facebook, Twitter and YouTube:

Facebook – <http://www.facebook.com/FairfaxCounty>

Twitter – <http://twitter.com/FairfaxCounty>

YouTube – <https://www.youtube.com/user/fairfaxcountygov>

Flickr – <http://www.flickr.com/photos/FairfaxCounty>

Instagram – <https://www.instagram.com/FairfaxCounty/>

SoundCloud - <https://soundcloud.com/FairfaxCounty>

1 – Public Web Site, Mobile App, Search and Navigation

Fairfax County's innovative use of technology combined with user-friendly web site design has streamlined the interaction between citizens and the government to provide the necessary tools for interaction and participation with County government. To improve citizen service delivery and provide effective e-Government services, the County website continues to be redesigned with improved functionality and accessibility features since its inception in early 2000. These efforts are achieved with various forms of outreach such as focus groups, online surveys, and usability tests with constituents. Various social media platforms are employed to expand and redefine communication efforts beyond traditional news releases. To continue empowering citizen access to public services, Fairfax County's Mobile App (available on various mobile devices) provides citizens the added convenience and flexibility of interacting with their government on the go from anywhere at any time.

In FY 2011 - FY 2013, acknowledging trends in high adoption rates of mobile devices, Fairfax County increased the value of its e-government efforts with the add-on of mobile apps for all platforms like iPhone/iPad, Android and Blackberry for free downloads. Our attention to stewardship of scarce resources was achieved by complete in-house development and repurposing of existing technologies. Mobile accessibility further enhances citizen's convenience and reaches a wider user community with the ability to access services and information in the palm of their hands.

In FY 2014, the County launched a family of new homepages for our primary website at www.FairfaxCounty.gov. The new County homepage uses responsive design to render seamless



information across three device types: desktop, tablet and mobile. The search engine was refined in FY 2014 to improve the accuracy and refinement of results and integrate select social media results.

In FY 2015-2016, the County started outlining plans to upgrade the current web content management system and reviewing the current information architecture to identify steps and gather requirements to improve, restructure and re-engineer the County's website. The goal of this initiative is to create a Web presence that is more topic oriented rather than an organization focused site. To date over 28,700 copies of the official Fairfax County Mobile App have been downloaded since its launch in June of 2011 with numbers increasing every day. Both the County's website and it's mobile version provide residents of Fairfax County with a wealth of information, online services and connectivity with their government, mobile browsing is undeniably on the ascendency – it is expected that more people will be using mobile devices to access the web than traditional laptops and PCs.

In FY 2017 - FY 2018, the program will continue its focus on more citizen/community engagement, providing multiple communication channels for access to County government 24/7 and on the go. The County's website and the County's mobile applications will be re-engineered to deliver more visual, intuitive, citizen-centric, and topic driven content. Enhanced search functionality and more native mobile applications will be deployed for public consumption. To further facilitate government transparency, enhanced access to County datasets will be provided. Open data broadens public transparency about government, improves responsiveness to community needs, and permits efficient data-driven decision-making through an engaged community.

Implementation of a new Enterprise Web Content Management System which started in FY 2017 will continue in FY 2018. This major initiative is replacing the web content management system, refining the current site's information architecture, redesigning the entire website with a more modern design and "mobile first" approach, as well as improving search functionality. The goal is to create more topic oriented web presence with improved business delivery model, enhance search engine optimization, generate better information indexing, and eliminate data silos thereby promoting transparency on the County's web site. The redesign effort is based on industry best practices, metrics and public engagement. The refresh and redesign is an ongoing effort of the e-Government Program to keep pace with evolving internet technologies and improvements in use, search, engagement, and open government initiatives.

2 – WEB Farm Infrastructure Architecture and Management

The following Internet/Intranet Infrastructure initiatives are on-going:

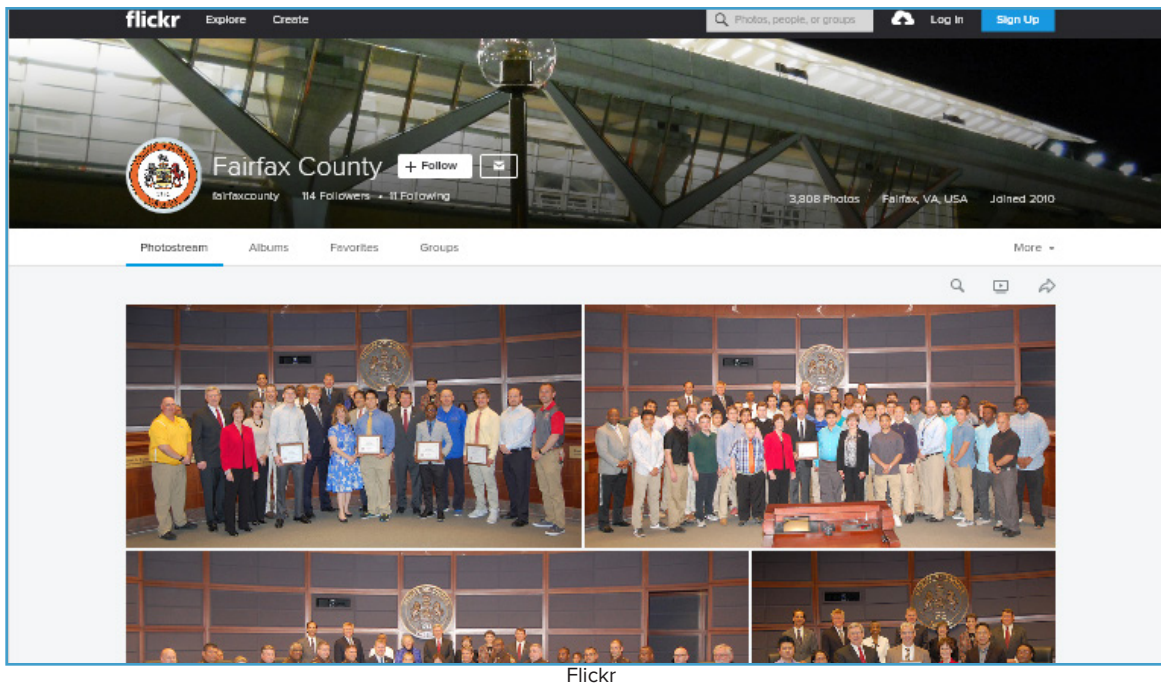
- Secured network settings on all 34 servers to minimize risk of intrusion
- Refined the server monitoring system
- Implement a statistical reporting system for both Internet and intranet servers

3 – Interoperability

The Fairfax County CAD2CAD Exchange between the 9-1-1 CAD systems of Alexandria, Arlington, Fairfax and the Metropolitan Washington Airports Authority provides the ability for these systems to exchange real-time fire and rescue unit status and incident data and allows dispatchers to request resources during mutual aid events from within their respective CAD systems. This collaboration is both a technology integration success and a long sought-after milestone in operations of 9-1-1 dispatch that reduces response times and improves service to citizens. Expansion of the CAD2CAD service regionally to Prince William, Loudoun, Montgomery and Prince George’s counties is underway. The unit and incident information from CAD2CAD is also available via web services that can be consumed as XML feeds by the Fairfax County Geospatial Data Exchange. This interoperability initiative, known as CAD2GIS, delivers map ready data services that can be consumed in agency dashboards for fire operations staff or in common map viewers in emergency operations centers for situational awareness.

4 – Intranet/Infoweb

“**FairfaxNET**”, the County’s intranet, which is an employee focused enterprise SharePoint portal that provides an intelligent platform to seamlessly connect users, teams and knowledge supporting the ability to leverage relevant information across business processes to help employees work more efficiently. FairfaxNET is a centralized resource for internal County content, forms, policies, news, application, training and other sources of information. It provides collaboration tools for agencies and work groups which are secure, convenient and a standard workspace for employees to work individually or collaboratively.



FairfaxNET is a centralized location for disseminating pertinent County wide, agency-specific or team/project-specific information. It also provides a venue for automating business processes.

Approximately 55 County agencies now have a presence on the County's intranet site (both InfoWeb and FairfaxNET), offering more than 11,000 HTML documents, 12,500 PDF documents, and 15,000 images on the internal site. Most agencies have Web content contributors, and Internet Services staff support content creation efforts for those agencies without a dedicated Web presence. The County's intranet will continue to be updated with additional access to enterprise data and interactivity, and expanded to become a viable alternative for full transaction-oriented applications. The addition of new information and increased business functionality is essentially an ongoing project. Based on conversations with a wide range of County managers, it is also expected there will be numerous concurrent application development requests from a dozen or more agencies for core web-enabled applications as the benefits of the technology become more widely recognized. These requests for support are handled on an as-needed basis based on priority, visibility and functionality, and highest Return on Investment.

FairfaxNET is the primary platform for access to internal applications, information and services, employee collaboration and information sharing, and collaboration with other agencies. FairfaxNET is also the gateway to the enterprise ERP solution (FOCUS).

In FY 2015 – FairfaxNET was upgraded to SharePoint 2013. FY 2017 - FY 2018 goals include development of project sites to manage and keep track of projects, implementing records management for document storage and archival purposes, and upgrading to SharePoint 2016 to keep the system in line with the evolving technology. Work will continue with the County agencies to automate and streamline business process for operational improvements.

5 – Web Content Management

A new Web Content Management system has been selected and is in the process of implementation. The scope includes fit-gap analysis, requirements refinement, defining information architecture (content classification), and system configuration with appropriate modules plug in/development to enable the reconstruction of the public website including search engine optimization. The refresh and functional aspect of the public website is an ongoing effort to keep up with evolving technology and public demand.

6 – E-Services

Internet Services prototyped new application development platforms and developed standards and best practices for the current environment. DIT supports other agencies in the development of Web content and applications.

Project Budget

In FY 2018, funding of \$725,000 supports the County's eGov program to meet the increasing demand for County's web, e-Government and on-line transactions services, implementation of the new Web Content

Management System, as well as improved navigation, web content synchronization, mobile applications, social media integration, transparency, Web 3.0, support of the County's intranet (FairfaxNet) and continued compliance with Department of Justice Americans with Disabilities Acts requirements.

Return on Investment

This project continues to provide single information architecture and supporting infrastructure for all platforms and new information and e-services to the public. It further expands the content management system to improve automated workflow, revision control, indexing, search and retrieval for enterprise systems. The project improves the search capability for citizens and constituents while enabling the County to build applications faster and more efficiently by maintaining reusable components. Public access technologies minimize staff resources necessary for providing basic information, thereby allowing staff deployment to more complex tasks that require detailed or specialized information.

2G70-041-000 Customer Relationship Management (CRM) Project

Project Description

Customer Relationship Management (CRM) is a foundational technology that supports the County's strategic goal of improving the quality and efficiency of responses to citizen requests/issues by integrating current stovepipe applications, implementing on-line 24x7 access strategies, social media tools, and techniques to enhance the overall customer experience and manage service requests via a single user enterprise-wide interface tool.

Project Goal

This project is a multi-year effort for the replacement of current legacy CRM solutions with an up-to-date solution that integrates with County agencies' business applications and processes, consolidating and reducing redundant hardware, software, and maintenance expenses. The enterprise CRM provides for unified tracking and case management of service requests and manages requests via a multi-platform CRM solution across many channels including e-mail, web, social media, and call center capabilities. The improved integration with the County's Web environment, e-mail and communications systems, promotes service efficiency and effectiveness, improved customer experience, and citizen engagement. Information and data provided with an enterprise view enhances opportunities for cross-agency processes and service planning.

Progress to Date

Phase I included environment setup, business process analysis, configuration, application development, and data migration for eleven County business systems including Board Offices. Phase 2 consisted of the successful data conversion and migration from IQ to the new CRM application for the Board Chairman's office and the Dranesville Board office.



In FY 2016 Phase 3 work continues business process design for the remaining Board of Supervisors' Offices, Department of Tax Administration, and Office of Public Private PartnershipsP3. Future phases (FY 2017- FY 2019) will continue planned migration of the additional 22 agency applications to the new consolidated CRM platform.

Project Budget

In FY 2018, funding of \$428,500 provides for continued deployment of an enterprise CRM for handling citizen's service requests, case management, and issue tracking.

Return on Investment

CRM technology facilitates increased efficiencies and effectiveness in managing the many citizen requests and interactions within and across County agencies and business functions. It allows a constituent-focused operation where government is positioned to be proactive to citizen concerns by enhancing collaboration among all agencies and by providing knowledge of common issues for follow-up. The CRM solution will also improve transparency by allowing constituents to easily view how the County manages their request by providing a tracking number. Consolidating intakes, reducing the number of duplicate request, and eliminating redundant systems provides taxpayer savings. This cost savings provide tangible evidence to citizens that their government is working for them efficiently by providing better access to information, optimized issue response/processing, and improved accountability/compliance.

2G70-069-000 Tax System Modernization Project – Tax/Revenue Administration

Project Description

This project provides the information systems development and technology infrastructure required to redesign the County's tax and revenue systems. The Tax/Revenue project facilitates a simpler process for citizens to fulfill their tax obligations and pay for services by modernizing the internal processes used for assessing, billing, and collecting County taxes and other revenues. In FY 2010, the County completed the replacement of the legacy real estate mainframe system with the Integrated Assessment System (IASWorld). This project provides for the replacement of the two remaining core tax systems, Personal Property and Business Professional and Occupational Licensing (BPOL) with a web based application. Implementation will allow for a comprehensive overhaul of many existing functions such as personal property account administration, business filing and licensing, vehicle registration, tax assessment, exemptions and adjustments, accounts receivable, and billing. Elimination of outdated technology platforms will enhance opportunities for integration with other County and State systems, as well as, facilitate citizen interaction and self-service opportunities via web based technologies.

Project Goals

The legacy mainframe platform for the Personal Property system and BPOL limits integration with other County and State systems, limits reporting, as well as constrains citizen interaction and self-service

opportunities via web based technologies. In addition to the technology constraints, in-house and contract programmer expertise to support the legacy applications is increasingly difficult to obtain and rapidly becoming more expensive. As a result, both tax applications can no longer support efficient assessment, valuation and collection activities. System enhancements and modifications, many of which are required by changes in State and County code, cannot be made economically and require lengthy development periods. Integration with Virginia State Department of Motor Vehicles (VA DMV) and Department of Tax Administration (DTA) applications which are critical for assessment, taxation, and enforcement purposes, cannot be automated due to limitations within Personal Property and Business Professional and Occupational Licensing systems.

Progress to Date

This project was initiated an in-house effort to redevelop the outdated legacy Personal Property Tax System which includes Personal Property and Business Professional Occupational License, Delinquent Collections and associated reports and interfaces to the cashiering system, WEB, and Commonwealth of VA DMV and DTA. The project goal was to redevelop legacy applications to modern, supportable technology platforms for the existing functionality. The focus was then expanded to include enhancing the citizen, business, and staff user experience with DTA. The expanded scope included database re-organization to eliminate batch processing requirements, addressing data deficiencies other application limitations, as well as DTA identifying business processing improvements and integration with on-line capabilities.

To date, the Business Professional and Occupational Licensing, and Delinquent Tax applications were delivered to DTA for user testing and evaluation in FY 2017. The initial version of the Personal Property application was also delivered for DTA user evaluation in June 2017. Web service integration with internal County applications (iNovah, MyFairfax/Tax Portal, and EPAY), external County partners (Department of Motor Vehicles, Department of Taxation) development and deployment of BPOL Online Filing and Payment Processing via the Tax Portal are scheduled for completion later in 2017. In addition, these applications are being optimized to facilitate mobile platform use by County staff and citizens, and enable seamless integration with state, County, and third party systems.

Project Budget

Additional funding is not included in FY 2018 budget.

Return on Investment

This project eliminates risks to County revenue generated from the assessment and collection of Personal Property and BPOL taxes. Modern technology platforms will enable the Department of Tax Administration to enhance customer access and improve services to citizens and the business community and enhance the security and use of web technologies for self service functions increasingly used by the community to interact with County systems. This project will also provide for automated integration with other County and State systems directly impacting the County's revenue collection activities, and contribute to retirement of the legacy mainframe environment in the data center.



IT-000006 Office of Elections Technology Project

Project Description

This project supports elections technology and data driven solutions for voting and elections equipment used by the Fairfax County Office of Elections. In addition, this project will ensure data driven solutions meet County needs for Election Day work flow processes as well as compliance with federal and state election mandates.

Project Goals

This project will support replacement of voting/elections equipment and Electronic Poll Ballots in Fairfax County.

Progress to Date

The schedule included procurement of the first portion of the equipment for the non-presidential elections in FY 2015 and FY 2016; the remainder to be purchased for the 2016 presidential election (FY 2017). The Office of Elections finalized procurement of the new Electronic Poll Books for deployment in time for the 2016 Primary Elections. Additional document imaging, data reporting and analytical tools are planned for phased deployment through FY 2018.

Project Budget

Additional funding is not required in FY 2018.

Return on Investment

This project will ensure the County's compliance with Federal and State elections mandates as well as the Report and Recommendations of the Presidential Commission on Election Administration and the Fairfax County Bipartisan Commission report on Election Improvement. These reports specifically addresses long lines at the polls in a Presidential Election. Both reports concluded that, as a general rule, no voter should have to wait more than half an hour in order to have an opportunity to vote. The industry is currently moving towards data driven solutions and newer technologies to ensure voters will have a positive voting experience at the polls.



IT-000007 Enterprise Project Management

Project Description

The Enterprise Project Management initiative addresses a need for a more structured enterprise approach to project and portfolio management for County projects and the County's IT Investment Portfolio. The project provides for dashboards and other tracking mechanisms to ensure more effective and streamlined management processes across County departments.



Project Goals

The goal is to implement a project/portfolio management solution to strengthen centralized management of the processes, methods, and technologies used to manage IT Projects. The proposed solution will provide an integrated dashboard for monitoring key project performance indicators; automated project tracking and reporting capabilities, standardized project management mythology, improved communication, collaboration and decision making, and reduce manual processes. A standardize project management solutions can support various business areas across multiple departments. In the event, that specialized software is required in specialized business areas, these solutions are expected to be integrated into the Enterprise Project Management tool. This project will also leverage and expand existing SharePoint licenses.

Progress to Date

Business process analysis, requirements, market research, and selection was complete in FY 2016. Work in FY 2017 - FY 2018 will include design, development, testing, and implementation of the project/portfolio management solution.

Project Budget

Additional funding is not required in FY 2018.

Return on Investment

Project/portfolio management tools provide the County with the ability to enhance management of large complex enterprise wide projects from start to finish. These tools enhance and improve project planning and organization, scheduling and resource management, cost control and budget management, collaboration, communication, decision-making, quality management and documentation. In addition, project management tools improve project resource management – physical, financial and otherwise, to meet overall project objectives.

IT-000016 Budget Solutions Project

Project Description

Fairfax County Government (FCG) and Fairfax County Public Schools (FCPS) have partnered on a multi-year, joint initiative to implement a budget solution to accommodate the requirements of the end-to-end public sector budget formulation process, projections, reporting and program measures. The annual budget process is an ongoing cyclical process simultaneously looking at two fiscal years (current and future/budget preparation).

Fairfax County Government (FCG) and Fairfax County Public Schools (FCPS) have similar overall budgeting processes with distinct development calculation methodologies, timeframes, and reporting requirements, necessitating the maintenance of autonomy between FCG and FCPS. Business requirements for handling



budget development and quarterly adjustments vary from year to year. A budget solution on a modern platform will provide the necessary structure and flexibility to meet strategic and tactical requirements also with flexibility to adjust to evolving needs and opportunities.

Modern technology will support preparation of complex budget publications with rapid turnover that rely on consistent data presentation and formatting, in which data must be quickly verified and edited and published in a variety of formats including the WEB.

Project Goal

This project plans to Development of a budget solution to support all facets of budget preparation on a single platform for both County and Schools including:

- Base and incremental budgeting for both expenditures and revenues
- Annual budget formulation and quarterly review adjustments
- Operating fund budgeting
- Multi-year Capital Project and Grant budgeting
- Modeling and forecasting
- Personnel expenditure forecasting, planning, and management

The new design also will:

- Support the end-to-end process in a single solution platform that is centrally developed and used across the Fairfax organization
- Facilitate autonomy between FCG and FCPS budget development processes and query
- Provide functionality to manage related budget office functions such as management and control of position count, performance measurement data tracking, budget monitoring and forecasting/projections.
- Presentation of budget data in a wide variety of formats and levels of detail including summary reports and detailed line item reports.
- Seamless integration of budget processes (development, monitoring, reporting, etc.) with enterprise financial and human resource processes, including the SAP financial system, FOCUS budget modules, grants, human capital management applications in County and FCPS.
- Integration with the FOCUS data warehouse for the extraction of budget and actual data at user-defined intervals and upon request.
- Implementation of security and user role management
- Achieve system maintenance and data management efficiency

Progress to Date

Phase 1 of the budget solution is currently in progress, with base requirements defined and development underway for County and Schools. Future phases for the solution include forecasting/projections, performance measurement data tracking, position count tracking, and budget monitoring.

Project Budget

Additional funding is not required in FY 2018.

Return on Investment

During the period since FOCUS went live, County and Schools budget staff have been utilizing different legacy and manual solutions for budget preparation needs. The marketplace did not have a commercial solution that met the needs of a local public budget formulation process of the complexity and scale of Fairfax County. After research the market and other governments, it was determined that custom development using industry standard tools and leveraging existing county IT infrastructure was the best and most cost effective path.

Phase 1 of this project will provide functionality for budget preparation and budget publication including the ability for central budget staff to prepare Advertised/Adopted budgets and quarterly reviews. The solution will provide a permanent budget system that will have built-in integration with other County systems including integration with the enterprise resource planning systems (FOCUS/LAWSON) and the reporting data warehouse while also providing security roles and user administration to allow access by department end users, thus relieving much of the additional work from central budget office staff. In addition, with role-based access, system controls and security are enhanced.

In addition, it is anticipated that the budget solution will be better positioned to mitigate risks for system failure by implementing disaster recovery and backup protocols on an enterprise platform. Also, the enterprise platform will be scalable and supported by multiple resources. Long-term opportunities remain in gaining operational improvements in a cost-effective manner through continuous implementation of enhancements on a platform that is scalable, maintained on-site and supported by in-house staff. Creation of a custom budget solution will allow for significant cost savings and efficiencies in terms of staff time management and other resources.



IT-000017 Enterprise Document Imaging Project

Project Description

This project provides for the multi-phase implementation of a contemporary enterprise document management platform and its utilization in support of County business functions. A contemporary Enterprise Document Management platform will support on-going County agencies' efforts for imaging documents and integration with case-management systems and/or agencies operations, and provide for a more cost effective means of compliance with mandated document retention requirements. The document imaging system will be implemented in web format such as Digital Media, 'cloud' architectures, mobile apps, and wireless 'smart' devices, as well as platforms that support cross agencies and enterprise class solutions. Current document imaging systems at the County will be upgraded to latest versions and newer technology.

Project Goals

Goals include implementation of a contemporary Enterprise Document Management platform designed to address the ongoing evolution of technology and its utilization in support of the business functions within the County. Enterprise Document Imaging systems continue to be refined to provide efficiencies and enhanced capabilities to support various agencies/divisions in the County. This project supports the strategic goals of reducing paper records, promotes efficient archival and retrieval of documents, and facilitates electronic workflow process improvement initiatives in County agencies.

Progress to Date

Contract has been awarded to multiple-vendors for Imaging and Record Management. Business, technical requirements, analysis, and working sessions are underway with several County agencies. Phased implementation began in FY 2016 with additional phases planned for FY 2017 - FY 2018.

Project Budget

Funding is not required in FY 2018.

Return on Investment

Enterprise Document Imaging systems will enable the County to have a rich document management and business process flow for retrieval and storage of vast quantity of required paper records. The new platform will automate workflows, improve business process efficiencies and productivity, reduce paper records and storage needs, and make data more accessible, easily retrievable, secure and compliant with records management regulations such as the Freedom of Information Act (FOIA). Implementation of a more current document management solution will enable on-line search of digital documents that will provide significant improvement in efficiency for County agencies using data as an integral part of daily operations. It also allows more effective use of advanced analytics for decision making, resulting in service improvements for Fairfax County residents. In addition to fast and reliable business processes, the document management solution minimizes the need for storage of paper records, reduces storage space needs and protects against mounting storage costs.

IT-000024 Integrated Library System Project

Project Description

This multi-phase project will replace the current aging Integrated Library System (ILS) used by the public and staff to access nearly all library transactions. The legacy system has reached end of life and will be replaced with a more contemporary integrated web-enabled system with social media features to provide better online features as well as informative content, enhanced formats, improved stability and response time. The Integrated Library System (ILS) is at the center of all library processes, integrating with the library's public-facing web pages, used for fine payment, online resources such as Overdrive for eBooks, enhanced catalog content such as NoveList, used for collection of delinquent accounts, collection analysis, mobile library catalog apps, SharePoint for internal work processes, and other services. In FY 2016, the system had 441,000 card holders and included 2.3 million items in the collection; it fulfilled 1.3 million customer holds and 12 million checkout transactions. The Library's website had 8.1 million page views and the ILS catalog had 23.2 million page views.

Project Goals

The goal of this project is to replace the legacy library information management system with a more contemporary ILS system with enhanced formats, improved stability and response time, integrated interfaces with all content, and a web-enabled system with social media features. Implementation of a new library system supports the Library's strategic goals of expanding access to information, resources and services; engaging and empowering the County's diverse communities; enhancing Fairfax County's investment in education, and fostering a culture of innovation and creativity.



Progress to Date

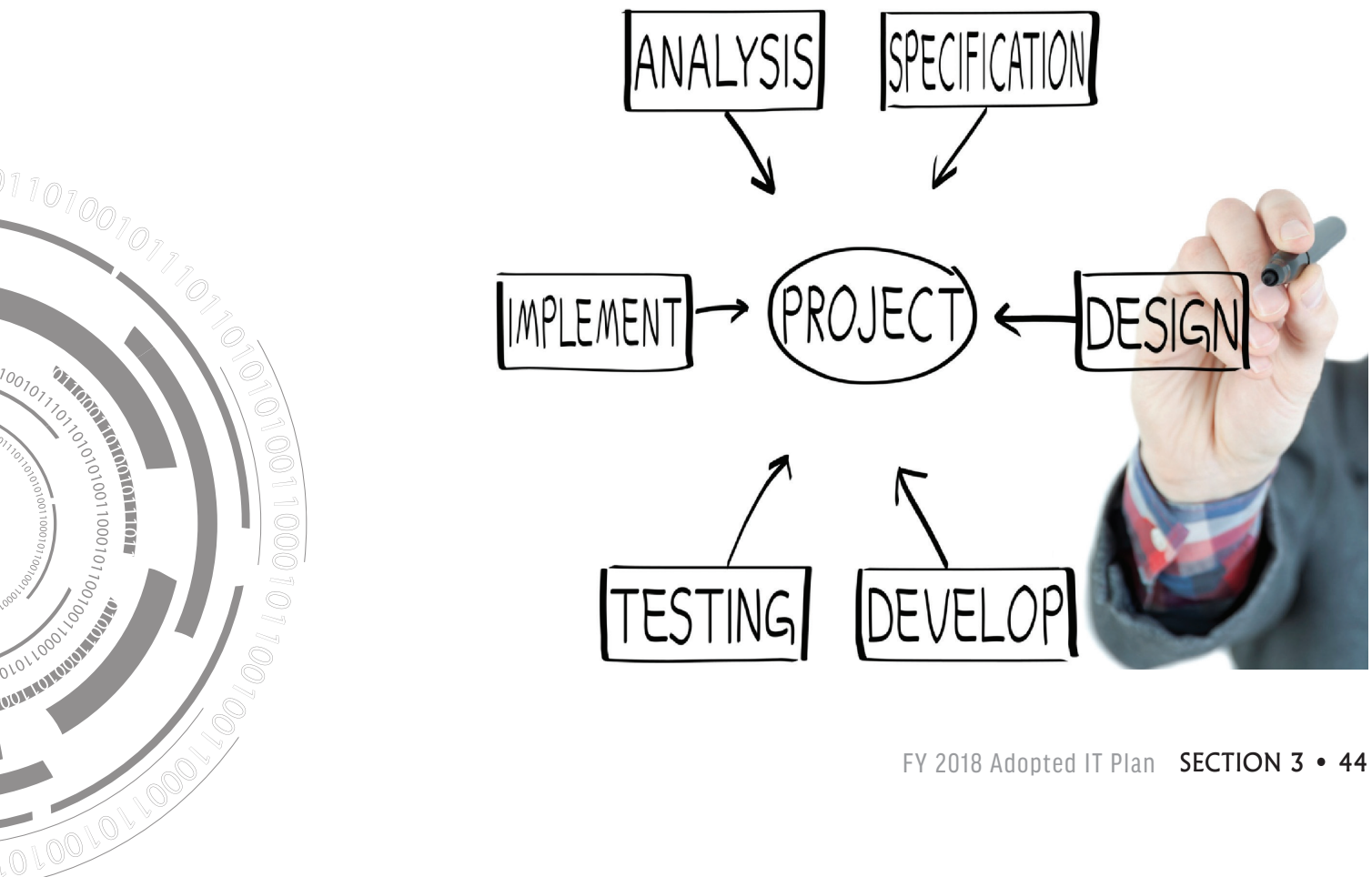
- Phase One: 2016
 - Conduct research, focus groups, surveys, write and publish RFP
- Phase Two: 2017
 - Select vendor, conduct legal review and purchase product
- Phase Three: 2018
 - Deploy and launch new product

Project Budget

Additional funding is not provided in FY 2018.

Return on Investment

The Integrated Library System replacement project will provide an enhanced customer experience for those who use library services, both in person and online. Every online transaction results in fewer transactions that need to be addressed by library staff. While there will always be services that are best managed by County employees, many of the most common library services can be managed by the customers independently. In a time of reduced budgets, enhanced online services can help maintain a high level of service. Public library customers, like all members of the public, are spending increasing amounts of time online and with mobile devices. A contemporary and fully-featured integrated library system, with elements intended to engage the public, will encourage the public to access and utilize the library's site to meet their needs.



IT-000028 Geo Spatial Initiatives

Project Description

GIS is a strategic foundational technology, integrated with numerous County applications and business processes. It is an essential component of County operations and is heavily used by a wide range of County agencies. GIS data and maps are heavily used in tax assessments, emergency response, public safety, planning and response in the Health Department, forest management, stormwater management, and planning and zoning.

GIS is utilized across most County agencies on a daily basis for planning and decision making. The quality of those decisions depends on the data being used. The current initiatives include support for 3 important sets of data: Ortho/aerial imagery; oblique imagery, and planimetric data. Ortho imagery is the foundation for placing most of the data in the GIS and planimetric data, derived from aerial imagery, is used in almost every GIS application in the County. The planimetric data is important to many County operations, the highly detailed contour and surface data is critical for the County's Stormwater Management Program. Oblique imagery is essential for critical 24x7 public safety tactical tasks, review of zoning applications, and provision of 3D data for Virtual Fairfax, a heavily used public web application averaging about 1/2 million sessions a year. Most recently, LIDAR is used more regularly as agencies recognize its value.

Project Goal

The value that GIS brings to County operations depends on the underlying data being as current as necessary for agency operations. This initiative supports acquisition, maintenance, and refresh of key GIS data assets at frequencies necessary for optimal County operations. Currently there are three data sets that must be maintained and goals for each are as follows:

- Oblique Imagery acquisition is to maintain that imagery every 2 years.
- Ortho Imagery is to refresh/acquire every 4 years (can be pushed to every 8 years under certain conditions).
- Planimetric data (derived from the ortho-imagery acquired with the state) is to refresh the County's planimetric data on a predictable schedule. Because of the size of the investment necessary to update/add approximately three million features, an 8 year refresh cycle, that is carried out across 4 years, was determined to be the most efficient and cost effective approach. The highly detailed contour and surface information is particularly important for the County's Stormwater management program.

Progress to Date

The County has been acquiring oblique imagery biennially for 13 years and will be re-flown in 2017. The imagery is used directly by Department of Tax Administration and many other agencies in the heavily used Geographic Exploration & (GEMS) application. Oblique imagery is also the source of the 3-D buildings that are used in the publicly available Virtual Fairfax application. The aerial and ortho imagery that is jointly acquired through the state is the essential foundation of the planimetric data update. It is also the



most locationally accurate base for placement of other County map-based data. This planimetric update is dependent on the availability of current aerial imagery from the state of Virginia in order to acquire the latest changes on the ground.

Project Budget

Funding of \$130,740 is provided support the County's Geospatial initiatives in FY 2018.

Return on Investment

Key GIS data sets are used in all County web applications that incorporate maps and in nearly all public safety vehicles through maps included in the CAD/911 system. The GIS database with new impervious features and contouring, facilitates key land use applications as recommended by the Fairfax County's Environmental Quality Advisory Council (EQAC). GIS data also provides County agencies readily accessible data for locations across the County and the ability to view field conditions from a desktop reducing the need to travel, resulting in significant staff time savings and improved response. Oblique imagery is essential for multiple County functions including critical 24x7 public safety response and tactical tasks, review of zoning applications, and provision of 3D data for Virtual Fairfax, a heavily used public web application. Planimetric data is planar data (2D) derived from observable natural and manmade features visible on aerial imagery, making up many of the key GIS layers used in most maps created in the County.



3.4 Technology Infrastructure

2G70-018-000 Enterprise IT Architecture and Support Project

Project Description

This project supports the strategic infrastructure and expert services required for complex multi-phase enterprise-wide business transformation of IT systems for County general services, enterprise technology, security and infrastructure, and corporate systems including the County's ERP and related business systems.

Project Goals

The main goal is to realize optimal system performance and infrastructure environment efficiencies, and support system enhancement and open-government initiatives. This includes various product platforms, security, middleware, document management, and the web services for seamless performance between Fairfax County Government agencies, and Fairfax County Public Schools environments. Additionally, the project provides for on-going transformation support activities, development of business intelligence and reporting model repositories, system performance, system engineering, security access technology and knowledge transfer. The funding supports projected system integration and configuration services and includes various product platforms, security, portal and web services enabling seamless system integration.

Progress to Date

A modern system landscape and server environment was implemented for development, testing, training, conversion and full production systems needs that support the SAP ERP solution, portals, security and third party bolt-on products for overlapping project phases. On-going infrastructure and specialized expert support services will continue in FY 2018 to support system enhancements and required upgrades, workflow and reporting improvements, transparency, system performance and engineering, security access technologies, and technical system refresh.

Project Budget

FY 2018 funding of \$1,696,000 provides continued support for strategic infrastructure and services necessary for continued work on enterprise wide business application and infrastructure processes.

Return on Investment

This initiative continues to support the County's on-going technology modernization program in line with the IT investment priorities that provide for a stable and secure IT architecture while leveraging IT investments. This program allows the system to be available on a 24 x 7 basis instead of business-day only use, which extends the ability of agencies to perform work with an improved window for planning and executing system maintenance activities with fewer resources. On-going support for modernization of County systems empowers both employees and managers to execute processes more efficiently, and support functions that improve overall system performance and availability.



2G70-026-000 Fairfax Radio System Project

Project Description

The County has two 800 MHz radio systems: the Public Safety system on newer technology supporting all the public safety responder agencies, and, the Public Service systems and a legacy 800 MHz radio system serving the general government agencies and Fairfax County Public Schools. The Public Safety Radio system was upgraded in FY 2014 to the new P25 digital/IP technology (this system is supported in the DIT Operating part of the E911 - Fund). The Public Service system is over 13 years old using proprietary technology developed in the 1990's and based on the older circuit-switched analog technology which is lacking in sufficient call processing capacity to meet current end user requirements, and has high maintenance costs. Further, at the end of 2018 the manufacturer (Motorola) has declared it will no longer be supported, thus system must be decommissioned as it can no longer reliable for critical communications. This project is to provide redundancy to improve the reliability and disaster recovery capabilities of Public Safety system, and retire the legacy Public Service system.

The initial plan was to leverage the expanded capabilities and capacity of the Public Safety Radio System P25 digital/IP system, however, after careful analysis and more recent availability of commercially based Push-to-Talk solutions, this project has been modified to replace aging Public Safety Answering Point (PSAP) dispatch center consoles, provide improved back-up and redundancy to the Public Safety radio system, and implement Push-To-Talk for non-public safety radio users. Implementing broadband wireless IP phones with Push - to - Talk for non-public safety users meets a wider set of business requirements for mobile workforce communications. These efforts will significantly reduce the County's recurring radio systems expenses while providing new capabilities for all of the Fairfax County radio users.

Project Goals

This project provides for the necessary upgrade of the Public Safety system for improved redundancy and modernized dispatch center equipment, and leverages commercial wireless IP phones with Push - to - Talk for numerous non-public safety County agencies including Connector, FASTRAN, FMD and DPWES fleets, and Fairfax County Water Authority, and the Fairfax County Public School Transportation Department (school buses) - approximately 3200 users.

Progress to Date

Following discussions with various agencies, the Push -To-Talk radio solution was successfully implemented in numerous County agencies, including: Community Services Board, Department of Vehicle Services, Department of Planning and Zoning, Elections Office, Department of Information Technology, Security Staff in the Department of Facilities Management, Fairfax County Water Authority, FASTRAN (CSB Merrifield Neighborhood Services). Meetings are underway to review, evaluate and document technical and business requirements for additional agencies including the Department of Public Works and Environmental Services, Department of Transportation (CONNECTOR), and Fairfax County Park Authority.

Interoperability links have been established between the commercial Push - to - Talk network and the P25 Public Safety radio network. Dispatch center call processing equipment has been upgraded at Department of Public Safety Communication (DPSC) and the County's backup facility, Towns of Herndon, Vienna and Fairfax City. The upgrade to the Public Safety radio system and disaster recovery began in late FY 2017 with completion scheduled in FY 2018. Fairfax County Public Schools can begin piloting the Push-to-Talk service when the amended code § 46.2-919.1 authorizing the use of wireless telecommunications devices becomes effective, July 1, 2017.

Project Budget

No additional funding is required in FY 2018.

Return on Investment

Broadband Push-to-Talk far exceeds the current Public Service system capacity and provides a future-proof solution by leveraging smartphones and reducing the out-year cost associated with a future “fork-lift” system replacement and associated annual maintenance costs for a separate system. The enhanced Public Safety Radio system will provide continuing dedicated utility and enhanced backup capability for improved reliability for Public Safety agencies and other emergency support functions. Leveraging the use of the new Push-to-Talk functionality on smart-phones provides enhanced mobile workforce capabilities for the County workforce at a lower cost. The two capabilities will be interoperable, allowing communication between public safety and public service users for incident or disaster management.

2G70-036-000 Remote Access Project

Project Description

This project supports enhanced and expanded capability of authorized County users to securely access the County's systems from remote locations for field service activities, telework, Continuity of Operations Plans (COOP), and emergency events such as pandemic outbreaks or natural and weather emergencies.

Project Goals

This project established an enterprise-wide standardized remote access control methodology and architecture that provides a solution for employees and external system users, partners and County customers to authenticate their identity in order to gain access to systems and relevant data to conduct work securely. All user authentication management is based on policy and centrally managed allowing for comprehensive audit and reporting services. This project supports increased security, simplified management, secure access from remote locations, and mobility.

Progress to Date

Through this project, over 4,000+ users can access County systems as authorized, with over 3,000+ able to gain access simultaneously. Project activity is on-going in order to support, enhance and expand enterprise wide remote access, which supports County Telework and Continuity of Operations (COOP) goals.



Project Budget

FY 2018 funding of \$100,000 continues support for remote access capabilities.

Return on Investment

This project provides a cost effective approach to enhance the County's infrastructure in order to provide flexibility for a variety of remote access devices that may be used by County staff. The capability encourages more employees to take advantage of telecommuting in line with regional goals supported by the Board of Supervisors and also provides County staff necessary remote access capabilities in case of emergency events such as snow storms, hurricanes or possible pandemic outbreaks.

2G70-052-000 Cyber Security Enhancement Initiative

Project Description

The Department of Information Technology defines and enforces the security standards and policies necessary to protect the County's information assets and technology infrastructure. This project supports ongoing cyber security projects and services to support various initiatives safeguarding the County's IT assets from evolving security threats, cyber security system enhancements, replacements and upgrades, service consultation expenses, and future security product and service acquisitions to assist with ensuring the confidentiality, integrity and availability of County systems and information and support for regulatory compliance requirements.

Project Goals

The goal of the County's IT security program is to ensure confidentiality of information, integrity of data, systems and operations, technical compliance with legal mandates such as HIPAA and PCI, privacy, and availability of information processing resources. The basic elements of identification, authentication, authorization, access control, and monitoring are employed throughout the County's technology enterprise.

Project Budget

FY 2018 funding of \$500,000 supports the County's Cyber Security program.

Return on Investment

Cyber security continues to be fundamental component of the County's enterprise architecture and strategy. The security architecture and practices fuse best practice principles with a hardware and software infrastructure supported by policies, plans, and procedures. This multi-layered approach is designed to provide an appropriate level of protection of all County information processing resources, regardless of platform, and includes incorporation of industry best practices for an overall risk reduction. The secure network architecture is a defense-in-depth approach to network security design. The County is dedicated to the protection of its IT assets from evolving cyber security threats and blocking unauthorized access to County data and information.

IT-000005 Government Risk and Compliance (GRC) Auditing Project

Project Description

The Governance, Risk and Compliance (GRC) Auditing Project provides for implementation of the SAP GRC system security user access monitoring and policy compliance solution. GRC automates security monitoring and provides real-time visibility to system access controls for the County's new ERP (FOCUS) system via a dashboard. GRC is used by the County's Department of Finance, FOCUS Business Support Group, Internal Auditor, DIT IT Security Office, and in support of the annual financial audit controls review process.

Project Goals

The goal of this project is to automate security monitoring and provide real time visibility of system access controls for the County's new FOCUS system via a dashboard. The GRC auditing system is an enterprise solution supporting required policy activities of Internal Audit, the Department of Finance, the Information Security Office, and senior management. The County's financial auditors have recommended this tool in connection with the preparation of the County's Comprehensive Annual Financial Report (CAFR).

Progress to Date

Multiple GRC modules are required to fully automate security monitoring and real-time visibility of system access controls for the County's new FOCUS system via a dashboard. To date, GRC Access Risk Analysis (ARA) has been installed in pre-production and production environments, which allows for generating Separation of Duty (SOD) reports on SAP standard and customized transactions/authorization objects. This feature enables the analysis of a new role development and/or any role changes to be reviewed and mitigated before moving beyond the development systems. The SOD reports are reviewed by business owners and remediation/mitigation implemented as required. Currently, 96.5% of the SOD's identified have been mitigated and/or remediated. Additional GRC modules are planned for FY 2018.

Project Budget

No new funding is required in FY 2018.

Return on Investment

The GRC auditing solution will help the County reduce the cost and effort needed to proactively prevent risk events and compliance violations. GRC software provides real-time insight into risk position, and embeds risk and compliance programs into the County's strategy, planning and operational execution. The potential benefits include reduced unauthorized access risk with centralized monitoring and management, improved visibility across risk initiatives, reduced impact and duration of risk events, decreased cost and effort of compliance, risk, and audit programs covering SAP financial, procurement, treasury, human resources and payroll systems.



3.5 Human Services

2G70-008-000 Document Management and Imaging Project – Department of Family Services (DFS)

Project Description

This is a multi-year, multi-phased project that supports the transition within the Department of Family Services (DFS) from manual to automated processes for filing, storage and access to records using document management platform technology. Phases focus on specific divisions of the agency with the goal of providing an agency-wide document management solution built on the County standard platform.

Project Goals

This project provides a reliable and secure system to catalog, archive and retrieve sensitive Family Services documents for case management and to improve response times for client inquiries of case records. In addition, the project allows for the management, retention and destruction of DFS records in accordance with State and Federal mandates, and avoids non-compliance issues associated with the degradation, damage, or loss of paper files.

Progress to Date

Project phases are delivered in modular components aligned with the readiness of the necessary infrastructure. Phase I implementation for the Self Sufficiency Division was complete by the end of fiscal year 2010. Since then the Family Self Sufficiency document management system stores over 70,000 client case files containing over 26 million documents.

In Phase II base document management functionality was implemented for the Children, Youth, and Families (CYF) division in FY 2013, since then 2,000 electronic family and child cases have been created containing over 30,000 documents.

Phase III is in alignment with the Human Services' Five Year Plan and the consolidated Document Management components in the Human Services Integrated IT System. The project will build upon the foundation implemented in Phase II and focus on the transition to the County's new platform for document management. Project work includes end user identified enhancements to improve functionality and incorporation of business and document workflows to ensure consistency of process.

Project Budget

Additional funding is not required in FY 2018.

Return on Investment

This project provides a reliable and secure system to catalog, archive and retrieve sensitive Family Services documents for case management, improved response time for client inquiries, enhanced management and retention and destruction of DFS records in accordance with State and Federal

mandates. The project also prevents non-compliance issues associated with the degradation, damage, or loss of paper files, more effective and efficient use of staff time, and reduced error rates. Additional benefits include improved case and document security, streamlined field work, enhanced opportunities for telework, and reduced space requirements and risks associated with maintaining and routing paper copies of documents.

2G70-009-000 Document Management and Imaging Project – Office for Children (OFC)

Project Description

This multi-phased document management project continues the structured enterprise approach of imaging and workflow capabilities in the Department of Family Services' Office for Children's (OFC). The School-Age Child Care Program provides direct services to over 13,000 children in 138 centers throughout the County. Files are maintained on all staff, children, and centers. The transition to an electronic system will ensure that County residents receive the most efficient, highest quality service and that all legal mandates are satisfied regarding record archival and client privacy.

Project Goals

This project provides for a structured enterprise approach to the development of imaging and workflow capabilities in agencies that have identified an opportunity to provide increased security and integrity of their records, reduce the labor intensive record retrieval and re-filing process, expedite workflow processes through an electronic workflow management system, provide simultaneous and instant access to records, and reduce costs associated with space and shelving for storage of paper requirements.

Progress to Date

In FY 2007, Phase I of the project transitioned Community Education and Provider Services (CEPS), Child Care Assistance and Referral (CCAR) program and the School Age Child Care (SACC) registration files from a paper-based system to electronic document imaging technology (Phase I). Phase 1 is currently in production. Head Start maintains files for over 350 children and families in multiple locations. With this technology, field staff and federal auditors have the ability to review files electronically without traveling to multiple locations.

Phase II of this project will be in alignment with the Human Services 5-Year Technology Plan and the Document Management component in the Human Services Integrated IT System. In FY 2017, the Human Services Information Technology Governance Board approved the Document Management component of the IT Roadmap and made it priority in the first phase of implementation. Department of Family Services/Office for Children was selected to be the pilot. This phase of the project will convert the existing the Office for Children's electronic document management system to the County's new document management platform. It will also include Head Start and School Age Child Care (SACC) paper records, addressing the need to electronically file over 12,000 children's records (emergency contacts and field trip



approvals), and center staff's training records (required by law to be stored at the 139 centers).

The transition to an electronic system will ensure that County residents receive the most efficient, highest quality service and that all legal mandates are satisfied regarding record archival and client privacy.

Project Budget

Additional funding is not required in FY 2018.

Return on investment

This project supports reduced paper usage and provides for more efficient and less costly file storage for the agency and County Archives. Imaging and workflow projects increase the security of records, protect sensitive information from unauthorized access, reduce staff time required for retrieval and re-filing of documents, reduce processing time as workflow efforts streamline the reviews required, provide a viable, accurate documents management system for old and one-of-a-kind documents, promote telework, reduce error rates by reducing manual data entry, and decrease the space requirements for maintaining paper copies of documents.

2G70-037-000 Child Care Technology Project – Office for Children (OFC)

Project Description

The Child Care Management System for the Office for Children (OFC) in the Department of Family Services (DFS) determines client eligibility, tracks child enrollments, and processes approximately \$1.5 million per month in provider payments for the Child Care Assistance Program and Referral Program. This application processes over 2,500 home child care facility permits for Community Education and Provider Services and connects families with child care providers participating in the Child Care Resource and Referral System. It also tracks current market rates for child care providers and interfaces with the County's financial management system.

Project Goals

This project will develop and implement a new Child Care Management System providing seamless integration of services with the Virginia Department of Social Services' (VDSS) automated child care system and with the Virginia Child Care Resource and Referral Network (VACCRRN). This project will also align reporting strategy with County and state data, reduce redundant data entry, improve operational effectiveness and productivity, enhance web self-service for the child care community, and bring OFC technology in compliance with County standards and requirements.

Progress to Date

An RFP was developed to address a comprehensive set of requirements that satisfied state and local need for a new solution that can also achieve client access and interoperability. The RFP process resulted in an award to a local firm. Phase I, which began in FY 2016 is substantially complete with the system in production providing the Office for Children with:

- Streamlined business process workflows and reports which enable staff, customers, and stakeholders to efficiently manage work and expectations.
- Enhanced interface with some Fairfax County systems and vendor supported systems thus eliminating manual duplicative processes.
- An improved Provider Access module which allows approved family child care programs to conveniently update elements of their business profile on OFC's website; request information about family child care permit requirements and inspections; and manage and view online Reimbursement Submissions.

Additional phases in FY 2018 will develop functionality required to meet federal and state legislative mandates, an archive and purge process, and enhancements to the CCMS system designed to improve OFC's operations and provide improved customer access.

Project Budget

FY 2018 funding is not required.

Return on Investment

Modernization of the child care system will ensure a stable application to support the business functions of the Office for Children. Efficiencies will be gained in seamless integration of processes for VDSS and VACCRRN allowing quicker processing of applications and child care permits. Migrating to a modern platform that incorporates web technology will provide improved accessibility to data and information from remote locations.

2G70-055-000 Volunteer Management System Project

Project Description

This project provides an integral approach for recruiting, scheduling, and managing volunteers on a daily basis as well as producing reports by operational unit. Aggregate reports across County agencies will also enable more accurate tracking and reporting of volunteer contributions to the citizens of Fairfax County. This system will also support integration with legacy volunteer software products used by County agencies and partners (some of which may be converted later).

Project Goals

The primary goal for this project is to better manage over 100 programs spread across multiple facilities within Fairfax County and facilitate enterprise growth of volunteer programs with a single software solution that improves recruitment, management, placement, and scheduling. Another goal is to better track the contributions of volunteer activities and provide a shared point of entry for citizens interested in volunteering with Fairfax County. Project objectives include developing common policies and data elements for the County's volunteer programs and streamlining the process of matching volunteer abilities, interests, and availability with County agency needs.



Progress to Date

Since the launch of the system in January of 2013, 22 agencies including more than 46 programs at over 250 sites around the county have been brought into the system. In addition, the system have been used to support volunteer recruitment for special events activities such as the Fairfax County Department of Transportation (FCDOT) Bike and Pedestrian Count, the 275th Anniversary event and the 50+ Employment Expo. The project is near completion. Work will continue with staff from the Board of Supervisor offices and the Office of the Clerk to the Board to complete requirements and post opportunities for the Boards, Authorities and Commissions into the VMS system. Once completed, it will allow tracking and reporting of the significant contributions of those serving Fairfax County in leadership roles.

Currently a work group of the County's Lines of Business Phase 2 is considering ways to improve efficiency and coordination of county and school volunteer recruitment. Recommendations will be presented to the BOS and School Board in summer 2017 and may include expansion of the VMS system

Project Budget

FY 2018 funding is not included.

Return on Investment

With over 1 million County citizens and with growing County budget constraints, volunteers are an important component in the sustainability of County programs and services. There are now more than 31,500 volunteers registered in the system, representing all supervisor districts, who are ethnically and educationally diverse. In FY 2016, volunteers provided over 1.3 million hours of volunteer service to the county; this effort has a value of \$33.8M in services provided and cost avoidance by the County – the equivalent of 1.5 cents in the tax rate.

An Enterprise Volunteer Management System expands the culture of engagement by providing centralized volunteering opportunities and facilitating the tracking and reporting of volunteer activities. This will also result in additional services provided to citizens and increased cost avoidance by the County as the program expands enterprise-wide. Additionally, capturing data about volunteer employers allows agencies to apply for corporate grants that are increasingly influenced by employee volunteer contributions.

IT-000008 Child Welfare Integration Project

Project Description

The Child Welfare Integration System project will provide a single source for case management and alleviate the time social workers spend updating multiple disparate state and local data systems as they work to serve children and families. Considerable time is lost from direct client services as social workers comply with manual processes and update redundant data in silo systems to fulfill both state and local program reporting requirements. The lack of integration between the various systems results in the

inability to demonstrate client specific and program-wide progress and does not support data driven decision making. Child welfare clients often exist in complex and unpredictable situations. As such, social workers need a view of all factors influencing children and families which allows them to assess the challenges and to develop comprehensive plans aimed at successful and sustainable outcomes.

Project Goals

The goal of this project is to develop a single solution for child welfare case management which provides a holistic view of case information, incorporates rules and assessment tools, business workflows, and provides for operational and compliance reports supporting effective service delivery. The Online Automated Services Information System (OASIS) mandated by the Virginia Department of Social Services (VDSS) for case management does not fully support child welfare practices and does not provide the Department of Family Services access to all the information required. Consequently, reporting on customer data is time consuming, requires redundant data entry and data validation with the state systems.

Progress to Date

Project initiation and planning began in FY2016; requirements analysis, design, development, testing, training and implementation phases will continue in FY 2018.

Project Budget

New funding is not required in FY 2018.

Return of Investment

The Child Welfare Integration System project will eliminate the duplication and redundancy involved with updating multiple stand-alone systems by providing a single secure portal for data recording activities, thus allowing social workers to do their job more effectively. The time savings gained can be applied toward guiding clients towards successful and sustainable outcomes. Savings are also anticipated with relation to measuring and understanding the impact of program efforts on participants through improved reporting capabilities to track efforts, outcomes, and participant progress. This system consolidation effort is expected to reduce the amount of IT support required to maintain the multitude of systems currently in place.

IT-000009 Participant Registration System Project

Project Description

This project will provide the Department of Neighborhood and Community Services (NCS) a consolidated electronic system to register and track participants at community, neighborhood, senior, and teen centers. Currently, participants who visit multiple centers complete a separate paper registration form for each center. Additionally, the NCS centers use different methods to track and count participants, including manual counting of paper sign-in sheets and small ad-hoc databases. As part of the new system, participants will be issued identification cards with identification codes that they will scan upon entrance at any NCS Center.



Participant data will be updated annually or as their information changes. The new system will enable staff to verify program/center eligibility and track participant attendance at both the center and the individual activities offered at the center, provide for better and more accurate data reporting, and enhanced protection of confidential participant data.

Project Goals

The primary goal of this project is to support implementation of one centralized, web based, participant registration and tracking system to be used at all NCS centers.

Progress to Date

NCS has entered into a joint effort with the Fairfax County Park Authority to obtain a solution that will both replace the current Park Authority ParkNet system, and also provide NCS with an electronic Participant Registration System. Phase I which included refining functional requirements, RFP development, solicitation, evaluation, and vendor/solution selection is complete. Phase II work that includes configuration, testing and implementation started in FY 2017 and will continue in FY 2018.

Project Budget

FY 2018 funding is not required.

Return on Investment

The primary focus of this new initiative is improved customer service, significantly enhanced efficiency and accuracy of data reporting, and improved data protection and security. Response from the community indicates tremendous acceptance of an ID card system for entrance into NCS centers. This project will significantly reduce the current burdensome paper registration process and will substantially ease the burden on the participants since each participant has to register only once to be eligible to use any NCS center. The system will also interface with existing financial systems in order to manage program and related fees. NCS will be able to use the data recorded in the system to meet state and local reporting requirements, assist in program development, and enhance results-based strategic planning within the agency. It is anticipated that revenue collection processes will be enhanced through the use of the proposed system.

IT-000020 County-wide Tele-Psychiatry Project

Project Description

The Tele-psychiatry Expansion project supports the Fairfax-Falls Church Community Services Board (CSB) initiative to expand the delivery of specialty and general psychiatry services to Fairfax County areas that do not currently have reasonable access to services. To meet the needs of these residents, CSB's Telepsychiatry project will expand the use of mobile televideo units to eliminate the rigidity of where clients are seen and increase efficiency by using other non-local psychiatrists.

Project Goals

Enhancement of existing CSB Telepsychiatry services, a component of telemedicine services using interactive audio, video, or other electronic media to provide diagnosis, consultation, or treatment. This project focuses on establishing the availability of static and mobile telepresence or teleconferencing systems for providing psychiatric services to underserved population of youth and adult clients and to make services available to additional sites and more clients.

Progress to Date

Major installation and configuration of hardware and successful preliminary testing with INOVA and Dominion Hospitals were completed in FY 2017. Additional Health and Human Services system sites to be rolled out in phases.

Project Budget

FY 2018 funding is not required.

Return on Investment

In addition to improved delivery of mental health services to the entire community, tele-psychiatry also results in reduced travel time for clients and CSB psychiatrists, increases efficiencies in provision of access to specialty psychiatric providers such as child and adolescent and psychiatrists who speak other languages especially Spanish, provides the ability to conduct unscheduled/emergent psychiatric evaluations 24 hours per day, enables delivery of enhanced psychiatric support for community partners, increases psychiatric evaluations from emergency departments in local hospitals, as well as hospital pre screenings, and pre-discharge psychiatric appointments.

IT-000025 Integrated Human Services Technology Project

Project Description

Within the Human Services system, clients, individuals and families are often assessed with multiple needs spanning multiple service programs. A holistic approach to addressing needs along the spectrum of crisis to self-sufficiency to sustainability, as well as strong communication, coordination and collaboration components are key factors in successfully meeting their needs. As the Fairfax County Human Services system moves to an Integrated Business Model, technology will be required to enable and support that vision. The data collected within the human services systems help develop policy which shapes future County action. The strategic use of innovative information technology to support Fairfax County's Human Services Systems will help find the connections in fragmented data and incrementally link pockets of information across and within functional areas for both a mobile and community based workforce, as well as a diverse client base. This project supports the development of a roadmap and implementation plan for integrated human services technology.



Project Goals

This project plans to develop a comprehensive view of clients and their needs; deliver a scalable set of properly coordinated services, improve service quality with accurate and timely data, and deploy and maintain cost-effective IT assets and services. A well-defined technology strategy will lead to solid planning and successful deployment of resources in support for the Integrated HS business model.

Progress to Date

IT Roadmap development including organization and facilitation of Process and Data Optimization and Requirements Teams, extended due diligence, educational showcase demonstrations, and an update to IT Five-Year Plan (post Roadmap completion) was complete in FY 2016. Targeted business process modeling and analysis in support of laying the groundwork for implementation of IT Roadmap initiatives were initiated in FY 2017. Roadmap implementation “ramp-up” which establishes the overall project management structure and support for procurement activities was completed in FY 2017, with phased implementation planned in future years.

Project Budget

FY 2018 funding of \$1,000,000 is provided to support of this strategic initiative.

Return on Investment

The strategic use of information technology to support Human Services in Fairfax County will help find the connections in fragmented data across many Human Services systems. It will incrementally link pockets of information across and within functional areas for both a mobile and community based workforce, as well as a diverse client base, and enable analysis of information across programs. Multiple agencies partnering to view clients holistically, tailor services to their specific needs and identify at-risk persons in a timely fashion will enable better client service. Creating an integrated view of client information across human services programs and a central point to access data from relevant human services systems will also remove redundancy in the client experience (e.g., eliminate the need for clients to submit basic eligibility information numerous times). Additionally, common standards will be created across agencies for critical areas such as IT security, data confidentiality, etc. and appropriate mechanisms to deliver information technology and services that support and improve preparedness, coordination, communication, compliance, and response of human service agencies will be designed.

IT-000026 Diversion First Interoperability Project

Project Description

This multi-agency, multi-phase technology project supports the County’s Diversion First Initiative, which has an overall goal of diverting people who have a mental illness and who have committed less serious offenses or may have criminal charges to treatment instead of incarceration or justice system involvement. The Diversion First Initiative spans multiple organizational systems including the Police Department, Office

of the Sheriff, Fairfax-Falls Church Community Services Board, the Court system, and many community partners. The Diversion First Interoperability Project supports this strategic County initiative with development of an interoperable data solution that spans these diverse organizational systems in order to determine success, track and monitor individuals, develop aggregated reporting mechanisms, and develop quality improvement approaches to improve outcomes.

Additionally, there are multiple system efforts connected to Diversion First. This includes a Crisis Intervention Team Training for law enforcement personnel and Mental Health First Aid training for first responders, justice system, and community members; the Merrifield Crisis Response Center, where law enforcement can transfer custody of individuals and allow them to be assessed for mental health emergencies and linked to needed services; the establishment of additional mobile crisis units to increase the County's capacity for emergency mental health services in the field; the creation of specialized mental health dockets in Fairfax County courts; the provision of mental health services to people transitioning from incarceration and/or requiring more intensive services in the community; and additional linkages between juvenile diversion services and the adult systems.

Project Goals

Information Technology is vital to support the data collection and return on investment measures across systems and within each component of the Diversion First Initiative. The project will identify associated internal and external systems of partner organizations and interventions as well as data elements and intervention measures across varied law enforcement, justice, and mental health systems to support the data collection, data sharing, and outcome evaluation of these diverse initiatives necessary to determine overall success and assist with decision-making and assessing outcomes.

Creating interoperable data capacity is vital to measuring outcomes and assuring quality improvement as additional diversion components are implemented. The Department of Information Technology will work collaboratively with all members of the Diversion First team focused on evaluation to assure that data requirements are identified and met.

Progress to Date

Logical model framework and process flows determined the need for an interoperable data system. An evaluation work group for the Diversion First Initiative was established to determine measures, data sources, and reporting needs. Data and reporting requirements will be shared with the Department of Information Technology upon completion of the data and evaluation pilot program during FY 2018. Future phased implementation plans will be developed in FY 2018 and beyond.

Project Budget

FY 2018 funding is not required.



Return on Investment

This technology project supports the goals of the County-wide Division First Initiative and will enhance effective use of County programs and resources by providing more real-time information about individuals for ascertainment in the diversion process. Replacing manual inquiries about past involvement in a mental health or related systems and implementing interconnectivity between disparate systems improves access to pertinent information, streamlines processes, and will result in more informed and timely decision making. Diverting individuals with mental illness away from jails towards more appropriate community based mental health treatment is an effective strategy, based on national models, to provide necessary mental health care, enhance public safety by making jail space available to more violent offenders, provide the criminal justice system with alternatives to incarceration, and reduce the cost and associated risks to the individual offender and the public.

IT-000027 Human Services Integrated Electronic Health Record System Project

Project Description

This project will deliver person-centered health care services and improve the health status of County residents. The County's Human Services agencies that provide essential health care services to residents - the Health Department (HD), the Department of Family Services (DFS) and the Community Services Board (CSB) – will pursue a common information technology solution that supports the development and management of individualized care plans. The system will also deliver functionality for inter-agency collaboration and interactions with other providers including but not limited to the County's Community Health Care Network and private providers in the community, authorization and coordination of health care services, documentation of health care encounters, practice management including event scheduling, workflow management and workload management, and revenue cycle management including registration, payer information, invoicing/billing based on encounter documentation and resource use, and functionality for financial and cost accounting.

Project Goals

Using the framework supplied through the Fairfax County Human Services IT Roadmap, the goals of this project are to elicit joint requirements for a common or interoperable solution, develop the optimal approach for acquiring and deploying the desired functionality and implement a solution that will support care coordination across Fairfax County Human Services System.

Progress to Date

This initiative is expected to commence with the completion of the final Human Service IT Roadmap, to ensure the planning and implementation fit within the larger human services technology landscape. The planning process, including requirements gathering, was well underway in FY 2017. It is expected that a phased implementation effort will be initiated in FY 2018.

Project Budget

FY 2018 funding of \$600,000 is included to support this multi-phased strategic initiative.

Return on Investment

While each agency provides distinct health care services and has unique documentation needs, there is significant value associated with leveraging a common information technology solution that has the requisite configuration flexibility and enables these agencies and other health care providers, including but not limited to the County's Community Health Care Network (CHCN) and private providers – to collaborate in the management of health care services they provide to the same residents and to more effectively coordinate those services. The implementation of this initiative will avoid the fully loaded cost of individual, independent systems within multiple Human Service agencies; increase data sharing capabilities among Human Services, Public Safety, and other key partnering agencies to view clients holistically, tailor services to their specific needs and identify at-risk persons in a timely fashion; create an integrated view of client information across human services programs and a central point to access data from relevant human services systems; remove waste and redundancy in the client experience (e.g., eliminate the need for clients to submit basic eligibility information numerous times); improve planning capabilities within Human Services agencies and across the system; increase visibility into, and accountability for, client outcomes, cost of service and other key program performance and success indicators; implement common approaches and standards across agencies for critical areas such as IT security and data confidentiality in keeping with Federal, State and County laws and regulations as well as with Integrative Model goals; and bridge service “silos” while increasing administrative flexibility.



3.6 Planning and Development

2G70-040-000 Facility Maintenance Management System Project

Project Description

This project provided for the initial acquisition and implementation of an Integrated Facilities and Grounds Management System which serves as a single, integrated facilities information resource for the Facilities Management Department (FMD) and the Fairfax County Park Authority (FCPA). FMD and FCPA hold the greatest portion of responsibility for the maintenance of the County's largest and most valuable physical assets: its properties, facilities, and the subsystems that keep them operational. The maintenance aspect must be fully integrated with the management of those assets by encompassing functional components and activities that support Lease Management, Space Management and Scheduling, Inventory Control, Grounds Management, Contracts Managements, Utilities Management, Physical Security, and Emergency Preparedness/Disaster Recovery.

Implementing a web based, "one stop shop" for facilities information, enables internal improvement and efficiencies as well as provides more accurate, completed, and timely information to customer agencies. By consolidating the redundant facilities tables and databases maintained by various branches within FMD as well as by the participating "partner" agencies, the County benefits from more consistent data and improved inter-agency coordination of information. Multiple County agencies currently use functionalities of this system to ensure County facilities, parks, grounds, sidewalks, curbs, trails and parking lots comply with requirements of the American with Disabilities Act (ADA).

Project Goals

The final phase of the project will upgrade the system to the latest software releases and fully leverage the system's functionality to minimize customization, simplify system upgrades, meet the business operational needs of FMD and FCPA, provide improved reporting, and integrate with the County's GIS data and systems, and the County's ERP system (FOCUS) for Human Capital and Financial management. Additionally, project goals include implementation of a mobile version of the application which will provide FMD and FCPA field staff real time remote access to work orders for increased efficiency from anywhere in the County.

Progress to Date

The project will continue work to upgrade the system's software platform and application to the latest version of the software. The upgrade and integration has been divided between:

- FY 2016 - upgrade of the system's Facility Maintenance module and the related features, as well as the integration with the County's ERP Human Capital Management System to populate the Portfolio with the County's employee data, and the implementation of the Facility Projects feature. The Facility Maintenance Module is the most widely used module of the system and has the highest upgrade priority from both stakeholder agencies.
- FY 2017 to FY 2018 – upgrade of the remaining modules and implementation of

the mobile application. Modules include: Facilities Management (Space Planning), Real Estate Management, Capital Project Management and Facility Condition

Assessment. Additionally, the integration of the County's financial management system Capital Projects Financial data and the GIS integration will be completed.

Project Budget

FY 2018 funding of \$500,000 is provided to complete this project.

Return on Investment

The upgraded Facilities Management system allows County staff to increase the efficiency of the facilities' maintenance service requests by providing a web based customer request and inquiry interface that saves staff time handling customers' status inquiries and work order processing from initiation to close out. Additional modules and features improve maintenance of critical facilities assets and reduce maintenance costs by automating the management of corrective maintenance services and automating preventive and condition-based maintenance processes to improve and extend the life of critical facilities assets. The system enables County staff to conduct condition-based facility assessments which helps in the prioritization of capital improvements, provides financial and environmental impact analysis to improve capital planning, and can extend the life of County facilities and assets. Other features include space measurement and audit tools that identify opportunities for better facility utilization and occupancy management; move planning and management to streamline relocation processes, and project administration features that track budgets, costs and schedules for more efficient facilities management. The systems' reporting module will provide staff with real time access report generation and improved Ad Hoc report writing versus current off-line and labor intensive methods. The on-line reporting will allow front line supervisors to easily review and analyze data.

IT-000010 Electronic Plan Submission and Review Project - Land Development Services (LDS)

Project Description

The Land Use Information Advisory Council appointed by the Board of Supervisors (BOS) issued several guiding principles that included more robust use of technology to facilitate the electronic submission and review of land use applications. The Department of Land Use Development Services plans implementation of electronic plan submission and review to enable architects, engineers and construction professionals to submit changes online by marking up or editing drawings 24 hours a day, 7 days a week, from anywhere in the world. The electronic process enables constant communication where clients are able to collaborate with one another for real time editing. The requirement for printing and transporting paper plans will be eliminated, enabling users to submit plans and track review progress in an inexpensive and efficient manner.



Project Goals

The goal is to leverage the pilot ePlans program conducted in the Department of Land Use Development Services and the Department of Planning and Zoning (DPZ) and expand the capabilities currently being developed to review building and site plans electronically. The ePlans initiatives will yield numerous benefits, including enhanced customer service, reduced carbon footprint, cost savings, cost avoidance, and meet recommendations of Board-appointed committees.

Progress to Date

The LDS ePlans pilot project includes the implementation of two major plan types to evaluate the software and hardware tools for usability in Fairfax County and the subsequent implementation of several additional plan types for use by industry until the PLUS system is implemented. The implementation team completed internal tests of multiple site plans and building plans including the electronic review of the County's Public Safety Headquarters building in CY 2015. The Site Plan ePlans module was moved into production in October of 2016 and is being used with several selected industry partners. The ePlans team also implemented ePlans for the New Commercial Building plan review process on a limited basis in March of 2017. The project has included partner review agencies including the Fire and Rescue Department, the Department of Planning and Zoning, the Health Department, the Engineering and Surveyors Institute (ESI), the Virginia Department of Transportation, and other agencies within the County (Urban Forestry, Capital Facilities, etc.).

Progress to date has substantially satisfied the original goals of the pilot project regarding usability of the system in Fairfax County. The remaining project goals include continued roll-out of the ePlans submission capabilities to additional selected partners followed by the industry at large. In addition to continued use of ePlans in production for both Site Plans and New Commercial Building Plans, the ePlans team is working towards an FY 2018 implementation of Commercial Interior Alterations, Minor Site Plans (MSP), and Major Site Plan Revisions (SPV). The Project will continue to work closely with the PLUS System project team to ensure the new system provides compatible and/or comparable electronic plan review capabilities. Additional phases will be evaluated and added as the project progresses to FY 2020.

Project Budget

FY 2018 funding is not required.

Return on Investment

This project will provide a streamlined and more collaborative plan review process, which advances Goal 3 of the County's Strategic Plan to Facilitate the Economic Success of Fairfax County: Improve the Speed, Consistency, and Predictability of the Development Review Process. In addition to streamlined review and plan submission processes, this project provides significant environmental benefits and financial savings stemming from reduced paper costs and reduced fuel consumption. Once implemented, this project will eliminate/significantly reduce the need to print large paper plans (each over 50 lbs.) and deliver them

numerous times for County review. Customer savings and improved customer service combined with a streamlined and more collaborative plan review process advance the County's goal of supporting and enabling further development and redevelopment throughout the County.

Additionally much of the current cost of physical storage (DPWES spends in excess of \$59,000 annually to digitize site plans for historical retention) will be eliminated when the electronic plan submission and review project is fully implemented. Other benefits include simplification of the plan submission and review process, staff efficiency, improved record keeping, streamlined review processes, improved accuracy of data transmitted due to a reduction in the number of times plan data needs to be copied and recopied, industry "goodwill" gained by satisfying a long-standing industry demand, and reduction of costs to retrieve historical plan records with a significant reduction of risk that the documents being sought have been inadvertently lost or destroyed.

IT-000011 ePlans Project – Department of Planning and Zoning (DPZ)

Project Description

The Land Use Information Advisory Council appointed by the Board of Supervisors (BOS) issued several guiding principles that included more robust use of technology to facilitate the electronic submission and review of land use applications. Since that time, the Department of Planning and Zoning (DPZ) has made the initial investment to develop and implement a pilot ePlan system for the zoning application process. This project supports the complete review process from distribution of the case material to the various County agency reviewers through action by the BOS to include archiving the final case materials, thereby developing a fully automated review process.

Project Goals

This project's goal is complete automation of the review process for rezoning applications. The ePlan system application has the ability to be customized with all zoning application types reviewed by the Zoning Evaluation Division, including Special Exceptions, Special Permits, and Proffer Interpretations and pre-applications submissions. Further, it is anticipated that the ePlan system can be customized for use by other Divisions within DPZ.

Progress to Date

This multi-phase project builds directly on the prior DPZ investment in CY 2014 for an e-Plan pilot project. Following successful completion of the pilot, this initiative will continue adding various plan types, other customers, and reviewers until fully deployed.

The Project will work closely with the Planning and Land Use System (PLUS) Project team to evaluate integrated systems that provide an electronic plan review capability. Additional phases will be evaluated and added as the project progresses until fully deployed in FY 2020.



Project Budget

This project does not require FY 2018 funding.

Return on Investment

The incorporation of the ePlan system for application submission and review will enable staff to process applications in a more efficient manner by significantly reducing the administrative aspects of manually entering application information into existing databases and tracking, copying and distributing the wide variety and growing volume of case materials. Staff resources will have the ability to place more emphasis on the technical review of proposals and assist in addressing efficiency issues related to the increased complexity of rezoning applications. The automation of the land use process, analysis, collaboration, distribution and parallel processing of agency comments and markups will yield considerable reduction in applicant costs and improved staff efficiency. A number of other jurisdictions surrounding Fairfax have implemented aspects of the ePlan system, including Montgomery County and the District of Columbia. Full implementation of this effort will place the County in a position of greater economic development appeal.

IT-000012 ParkNet Replacement Project

Project Description

This project supports the Park Authority's initiative to replace the legacy ParkNet system with a commercial, off-the-shelf (COTS) application to meet Park Authority and County requirements. ParkNet, the Fairfax County Park Authority's key management and information business application was implemented in the early 1990's and facilitates all point-of-sale activities, internet class registrations, program and camp registrations, pass holder and class attendee check-in, and maintains critical user information. ParkNet is now technologically outdated and without adequate support from the vendor.

The Park Authority operates nine recreation centers (RECenters) with indoor swimming pools and a variety of fitness/classroom/gymnasium spaces; three lake front parks; 68 picnic facilities, several historic sites that can be reserved; two campgrounds; five nature centers, and several other unique facilities that apply user fees and charges such as general admissions, passes, retail sales, equipment and facility rentals, classes and events. In addition to these sites, recreation programs are also held at non-FCPA locations throughout the County including public schools and private vendor sites.

Project Goals

The project will replace ParkNet, the key management and information system for the Parks. The system no longer meets the present business requirements of the Park Authority, is technologically out-of-date, and out of compliance with current County IT standards (it was implemented before most County standards for applications of its size were established).

Progress to Date

An agency task force documented and compiled requirements for the system. The Park Authority then partnered with Neighborhood and Community Services (NCS) to develop a Request for Proposal (RFP) for the Recreation Management System that addresses the requirements of both agencies. The RFP was issued, responses were received and evaluated with vendor selection and contract award complete. Implementation began in FY 2017 and will continue in FY 2018.

Project Budget

FY 2018 funding is not required.

Return on Investment

The ParkNet application has become an essential component of providing the County's citizens with the parks and recreation services they expect. With expanded system capability there are opportunities for improved customer satisfaction resulting in enhanced revenue through new application features the agency intends to implement, such as Electronic Fund Transfer payments for pass sales and online facility reservations. Investments in automating Park applications have resulted in increased revenue collections. Revenue collected and recognized through ParkNet totaled \$47,298,219 in FY 2013; an increase of more than 200% since ParkNet was implemented in 1995.

IT-000019 Planning and Land Use System (PLUS Project) (Fairfax Inspections Database On-line (FIDO) - Land Development Service (LDS) System Replacement Project)

Project Description

This multi-phase initiative will replace and consolidate numerous legacy land use systems supporting zoning and development plan review, building permit/license issuance, code enforcement, inspection, and cashiering activities. The disparate legacy systems are heavily customized, unable to meet County business processes, customer service goals, deliver an integrated technology platform for seamless customer and staff interaction, and support land use and development operations. Land Use systems targeted for replacement include the 20 year-old Land Development System (LDS), Plans and Waiver System (PAWS), Zoning Application System (ZAPS), the 13 year-old Fairfax Inspections Database Online system (FIDO), and several complementary systems that provide e-services, and mobile wireless support for citizens and inspectors. These systems lack the native agility of modern technologies that provide a flexible enterprise platform for evolving business process and architecture requirements; they rely on outdated business processes, lack optimal security capacities, and have compatibility issues with emerging desktop, tablet and mobile wireless technologies.



Project Goals

The goal of this project is to modernize the technologies supporting land use and development processes, which is in direct support of the County's Strategic Plan to Facilitate the Economic Success of Fairfax County, specifically Goal 3: Improve the Speed, Consistency, and Predictability of the Development Review Process. The PLUS project also aligns with other strategic initiatives including Fairfax First (an initiative to improve the speed, consistency, and predictability of County development review processes), zMod (an a plan to modernize the County's Zoning Ordinances), Chairman's Community Council of Land Use Engagement, and Phase 2 of the County's Lines of Business: requiring the delivery of modern, private-sector experiences, digitization, and multi-system integration opportunities.

This project will replace numerous legacy land use systems with a consolidated, modern enterprise solution that supports the County's zoning and development plan review, building permit/license issuance, code enforcement, inspection, cashiering activities, proffer management, and other related processes. Current systems are 13 to 20 years old; incorporating business requirements necessitated by newly mandated activities has become a challenging and time-consuming process that threatens system stability. In addition, the use of modern technologies, such as tablets, smartphones, web services, dashboards, and a single customer portal, is limited due to the age of the current technical architecture. Replacing the legacy systems will greatly reduce threats to system stability and will enable the use of technologies that will improve customer service and operational efficiency.

Progress to Date

The project has established governance structure, project plans, developed statement of work, and contracted for consultant support to develop a high-level service delivery model, business requirements, and procurement support.

In addition to replacing LDS and FIDO, the new system will also replace over a dozen complementary systems that have been developed over the years to meet new business requirements. Initial review of the modernized platforms offered by software vendors have shown very robust and feature-rich product offerings that will help the County achieve the recommended improvements in the Strategic Assessment.

Pre-planning and assessment of the current state started in FY 2016, progress highlights and plans include:

- Refinement of functional and technical requirements for 13 business areas teams in multiple stakeholder agencies (Land Development, Planning and Zoning, Health Department, Fire and Rescue, Department of Code Compliance, Department of Information Technology, and several other reviewing agencies including Public Works, Transportation, Parks, Fairfax County Schools, Fairfax Water, and Virginia Department of Transpiration.)
- Selection of a replacement system is targeted for FY 2018
- An iterative configuration approach is planned, with project completion anticipated in FY 2021

Project Budget

In lieu of FY 2018 funding, it is anticipated that FY 2017 Carryover of \$1,400,000 will continue support for this strategic County initiative.

Return on Investment

In addition to providing a single enterprise platform that will enhance land use service delivery activities while eliminating risks associated with legacy system failure and recovery efforts, the PLUS project will deliver a customer service portal for constituents and industry partners with more real time status and transparency about permit applications and land use transactions. Other significant benefits to citizens and staff include GIS integration, modernized mobility platforms for customers and staff, integration with e-Plans, decreased processing cycles, opportunities for business transformation, a scalable and flexible configuration to support evolving business needs, future improvements, and delivery of improved metrics and reporting capabilities.

Capital Project Management Information System (CPMIS)

Project Description

This project will provide the Department of Public Works and Environmental Services (DPWES) and Department of Transportation (FCDOT) with a single capital project management information system (CPMIS) to manage, track and report capital project management information. The new technology solution will allow DPWES and FCDOT to move beyond project “tracking” to a cradle-to-grave system that allows management of the entire capital project lifecycle. In addition, the system will be relevant to what the construction and architect/engineering industry uses. Other County departments involved in construction project management may leverage the results of this project to achieve similar functionality in future efforts.

Specific components for the County solution will include:

- Project Planning
- Project/program scheduling, coordinating and tracking
- Contract management
- Document management
- Financial management
- Communication
- Reporting

Project Goals

The project will improve the efficiency of capital project management, increase transparency into the project portfolio and individual project status, and consolidate financial and status reporting across all DPWES and FCDOT capital projects.



Progress to Date

A Request for Proposal (RFP) was issued for a Capital Project Management Information System (CPMIS) and associated implementation services. The RFP addresses the unique project management, contract management, financial management, document management, reporting, and technical needs of capital project management. The Selection Advisory Committee, made up of key stakeholders from the Department of Public Works and Environmental Services (DPWES) and the Fairfax County Department of Transportation (FCDOT) as well as the Department of Information Technology, have begun the vendor selection process.

In preparation for system implementation, the processes of managing major capital project types within DPWES and FCDOT were documented. Process mapping for wastewater, stormwater, building and transportation project life cycles was completed. A series of iterative interviews and workshops was held to elicit and document the business processes, including any minor improvements, so that the CPMIS Coordinating Team and County leadership can agree upon documented processes in an informed fashion. The project life cycles cover the planning, pre-design, design, construction and post-construction phases of each project type. In addition, the processes for managing developer default and public-private partnerships were documented. Final documentation, which will be provided to the system implementer, includes process tasks, workflows and roles and responsibilities.

Project Budget

The cost of the project will be determined as proposals are received from vendors that meet mandatory, minimum qualifications. Project costs will be charged to capital projects in the Department of Public Works and Environmental Services and Fairfax County Department of Transportation.

Return on Investment

The Capital Project Management System will reduce the amount of time project managers spend on administrative project management tasks, allowing them to manage their project more efficiently. In addition, the system will eliminate the duplication of data entry into multiple systems and spreadsheets, thereby resulting in time savings for project managers, construction managers, budget analysts, and financial managers.

